APPENDIX C

IS/NOP and Scoping Report and Summary of Comments

Initial Study/Notice of Preparation

Alan C. Lloyd, Ph.D.
Agency Secretary

State Water Resources Control Board

Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5518
Mailing Address: P.O. Box 2231 • Sacramento, California • 95812
Fax (916) 341-5709 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

To All Interested Parties:

NOTICE OF PREPARATION OF A STATEWIDE PROGRAM ENVIRONMENTAL IMPACT REPORT FOR ON-SITE WASTEWATER TREATMENT SYSTEM REGULATIONS

The State Water Resources Control Board (State Water Board) will be the lead agency for preparation of a statewide program environmental impact report (EIR) for statewide regulations addressing on-site wastewater treatment systems (OWTS) as described in this Notice of Preparation (NOP) and the attached initial study (IS). One of the principal goals of this NOP and the accompanying IS is to inform agencies and the public about issues related to the project and request information on the scope and content of the program EIR. The preliminary project description, description of alternatives, and preliminary list of environmental issues to be addressed in the draft EIR are contained in the accompanying IS. This NOP and the accompanying IS may also be viewed and downloaded from the State Water Board's home page at http://www.waterboards.ca.gov/ab885. We encourage recipients of this notice to inform others who may have an interest or responsibility regarding OWTS that this NOP is available for review.

The SWRCB staff has made a preliminary determination that the following issues are of concern and should be addressed in the program EIR:

- Hydrology (including groundwater and surface water hydrology)
- Geology and soils
- Water quality
- Public health
- Biology (focusing on biological resources associated with aquatic, wetland, and riparian habitats)
- Utilities and service systems
- Growth inducement (including the proposed project's potential to induce or restrict growth)
- Cumulative impacts (focusing on how the proposed project may contribute to cumulative impacts along with past, existing or reasonably foreseeable related actions by others)

This NOP and the accompanying IS are being circulated for a 60-day public review period. Because of time limits mandated by state law, agency responses should be submitted as soon as possible and must be received no later than August 8, 2005.

Please send comments concerning the scope or content of the program EIR to:

Todd Thompson, P.E., Program Manager
State Water Resources Control Board, Division of Water Quality
P.O. Box 2231
Sacramento, CA 95812
phone: (916) 341-5518
email: TThompson@waterboards.ca.gov

Please identify a contact person who would be available to answer any questions regarding your comments.

Public scoping meetings to solicit additional public input have been scheduled at the following locations and times:

City	Place	Address	Date	Time
Riverside	Art Pick Council Chamber	3900 Main Street	Thursday, July 14	7 p.m.
Santa Rosa	North Coast Regional Water Board Hearing Room	5550 Skyline Boulevard, Suite A	Monday, July 18	7 p.m.
Malibu	Council Chambers	City Hall 23815 Stuart Ranch Rd.	Tuesday, July 19	7 p.m.
Sacramento	Coastal Hearing Room, 2nd floor, Cal-EPA Building	1001 I Street	Wednesday, July 20	7 p.m.
Redding	City of Redding Community Room	777 Cypress Avenue	Thursday, July 21	7 p.m.

Those persons wishing to participate further in the CEQA process or learn more about the agenda for each of the proposed meetings can contact Todd Thompson at 916-341-5518.

Sincerely,

Stan Martinson
Chief, Division of Water Quality

Enclosure

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Initial Study/
Notice of Preparation of an EIR

for the

State Water Resources Control Board's On-site Wastewater Treatment System Regulations

STATE of CALIFORNIA

Prepared by:

EDAW

June 2005

Initial Study/
Notice of Preparation of an EIR

for the

State Water Resources Control Board's On-site Wastewater Treatment System Regulations

STATE of CALIFORNIA

PREPARED FOR:

State Water Resources Control Board
Division of Water Quality
1001 I Street, 15th Floor
Sacramento, CA 95814

Contact:
Todd Thompson, P.E., Program Manager
916/341-5518
916/341-5252 (fax)
email: TThompson@waterboards.ca.gov

PREPARED BY:

EDAW
2022 J Street
Sacramento, California 95814

Gary Jakobs, Principal
Mark Farman, Senior Water Resource Planner
Debra Lilly, Project Manager

June 2005

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1 INTRODUCTION

1.1 OVERVIEW AND REGULATORY GUIDANCE

On-site wastewater treatment systems (OWTS) treat wastewater and discharge effluent. This Initial Study (IS) has been prepared by the State Water Resources Control Board (State Water Board) to evaluate the potential environmental effects of implementing proposed statewide regulations for siting, installation, operation, and maintenance of OWTS. The State Water Board is required to draft and implement statewide OWTS regulations under Assembly Bill 885 (Chapter 781, Statutes of 2000), which was approved by the California State Legislature and signed into law in September 2000 and codified as Sections 13290-13291.7, Chapter 4.5, Division 7 of the California Water Code; see Appendix A.

This IS has been prepared in accordance with the California Environmental Quality Act (CEQA) (Pub. Res. Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.). An IS is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with State CEQA Guidelines Section 15064(a), an environmental impact report (EIR) must be prepared if there is substantial evidence (including the results of an IS) that a project may have a significant effect on the environment. A negative declaration (ND) or mitigated negative declaration (MND) may be prepared if the lead agency determines that the project would have no potentially significant impacts or that revisions made to the project, or agreed to by the applicant, mitigate the potentially significant impacts to a less-than-significant level (State CEQA Guidelines Section 15064[f]). Based on the results of this IS, the State Water Board has determined that an EIR will be prepared for this project. For this reason, a Notice of Preparation of an EIR (NOP) has been issued along with this IS.

The proposed project under CEQA is the adoption and implementation of the proposed statewide OWTS regulations as required by AB 885 (and the related California Water Code sections, included in Appendix A of this IS). These proposed regulations would be administered by the State Water Board and would be incorporated into the water quality control plans (also referred to as basin plans) of all nine California Regional Water Quality Control Boards (Regional Water Boards). The Regional Water Boards would implement these regulations along with those authorized local agencies (ALAs) that would be given authority by the Regional Water Boards to implement and enforce the regulations.

1.2 LEAD AGENCY

Under CEQA, the lead agency is the public agency with primary responsibility over the proposed project. The State Water Board is the lead agency under CEQA for this project because of its regulatory authority over water quality in California and, as specified in the legislation, its lead role in developing the new OWTS regulations.

1.3 PURPOSE AND ORGANIZATION OF THIS DOCUMENT

The purpose of this IS is to evaluate the potential environmental effects of the proposed project. Because the State Water Board has determined that an EIR will be prepared, this IS identifies which environmental issues will be carried forward for further evaluation in the EIR and those issues that will not be assessed in the EIR because the proposed project does not have the potential to significantly affect related resources.

This document is organized as follows:

- Chapter 1, “Introduction,” describes the purpose and organization of this document.
- Chapter 2, “Background and Description of the Proposed Project,” provides background information about the initiating legislation, briefly describes how OWTS operate, identifies issues of concern that were the

impetus behind passage of AB 885, lists the project objectives, and provides a brief description of the proposed project and its alternatives.

- Chapter 3, "Potential Environmental Impacts," explains the approach and assumptions used to conduct the initial environmental study and that will form the basis of the EIR analysis. Chapter 3 uses the topics provided in the State CEQA Guidelines' Environmental Checklist (Appendix G of the State CEQA Guidelines) to evaluate a range of potential impacts.

- Appendix A contains Sections 13290-13291.7, Chapter 4.5, Division 7 of the California Water Code, which are the codified requirements of AB 885.

- Appendix B contains Section 13269 of the California Water Code, which includes the codified requirements of SB 390 and SB 923.

- Appendix C contains the proposed OWTS regulations.

- Appendix D contains Water Code Sections 13260 and 13263, which describe the process of establishing waste discharge requirements (WDRs).

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental Checklist and a related discussion of each type of potential impact that could result from implementation of the proposed project. Based on the results of this analysis, Chapter 3 identifies those types of resources that could be significantly affected by the proposed project, and these potential impacts will be carried forward for further evaluation in the EIR. Those resources that would likely not be affected, or would experience less-than-significant impacts, also are identified in Chapter 3.

1.5 PUBLIC REVIEW AND COMMENT

This IS is available for a 60-day public review period beginning June 8, 2005, and ending on August 8, 2005. Written comments may be submitted by August 8 to:

Todd Thompson, P.E., Program Manager
State Water Resources Control Board
Division of Water Quality
P.O. Box 2231
Sacramento, CA 95812-2231
email: TThompson@waterboards.ca.gov

1.6 SCOPING MEETINGS

During the public review period on the IS and NOP, a series of public scoping meetings will be held to inform agencies and the public about the proposed project and to provide opportunity for public comment on the NOP and issues to be evaluated in the EIR. The public scoping meetings are scheduled for the following dates and locations:

City	Place	Address	Date	Time
Riverside	Art Pick Council Chamber	3900 Main Street	Thursday, July 14	7 p.m.
Santa Rosa	North Coast Regional Water Board Hearing	5550 Skyline Boulevard, Suite A	Monday, July 18	7 p.m.

City	Place	Address	Date	Time
	Room			
Malibu	Council Chambers	City Hall 23815 Stuart Ranch Rd.	Tuesday, July 19	7 p.m.
Sacramento	Sierra Hearing Room, 2nd floor	Cal-EPA Building 1001 I Street	Wednesday, July 20	7 p.m.
Redding	City of Redding Community Room	777 Cypress Avenue	Thursday, July 21	7 p.m.

Your participation is encouraged and you may provide the State Water Board with written comments as noted above or provide verbal comments at one of the scoping meetings listed above.

2 BACKGROUND AND DESCRIPTION OF THE PROPOSED PROJECT

This chapter provides background information about the function and types of OWTS, the types of issues involved with wastewater treatment systems in California, the existing regulatory structure, the rationale behind the passage of AB 885, and statutes related to the issuance and waiver of WDRs. The proposed draft regulations developed by the State Water Board (which are provided in Appendix C) are summarized according to the seven primary points identified in the legislation. Alternatives to the proposed project, which will be evaluated in the EIR, are also described.

2.1 BACKGROUND: OWTS REGULATION AND OPERATION IN CALIFORNIA

The purpose of this section is to provide the reader with a brief overview of a number of important topics related to the issues addressed by AB 885, including WDRs and waivers of WDRs. These topics are also fundamental to understanding the intent and responsibilities of the State Water Board and Regional Water Boards as they implement the proposed statewide OWTS regulations required by AB 885 and included in Appendix C. All of the topics addressed in this section will be described in more detail in the OWTS Regulations EIR.

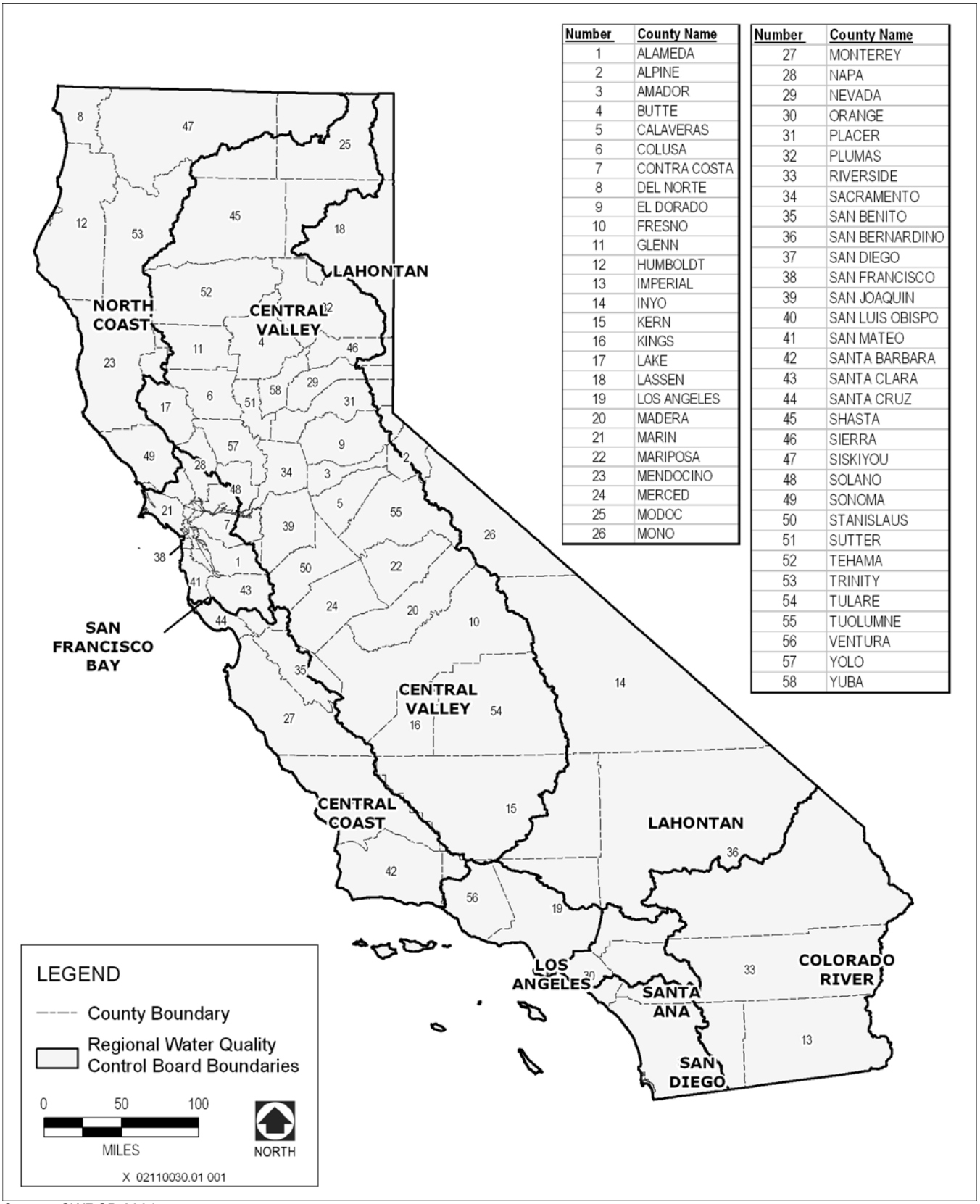
2.1.1 REGULATORY SETTING AND THE NEED FOR STATEWIDE REGULATIONS

The existing regulatory framework surrounding installation, operation, and maintenance of OWTS is complex and varies at the regional and local levels throughout California. This section provides a brief overview of this setting to help the reader understand one of the driving forces behind the intent of AB 885.

A broad network of federal and state laws provides the State Water Board, Regional Water Boards, California Department of Health Services, and local environmental and public health agencies with the authority to protect beneficial uses of water, including the protection of drinking water and public health, by regulating OWTS discharges and other sources of contaminants that have the potential to cause adverse water quality effects. These laws include the Federal Water Pollution Control Act of 1972 (Clean Water Act), Safe Drinking Water Act of 1974, subsequent amendments to these laws, and California's Porter-Cologne Water Quality Control Act of 1969 (Water Code Section 13000 et seq.), its subsequent amendments and related state policies.

California has nine Regional Water Boards (see Exhibit 1) that work independently of each other but in cooperation with the environmental and public health agencies of the counties, cities, and, in some cases, special districts that have been created to help regulate or finance OWTS. As further described below, the Regional Water Boards often rely upon these local agencies to help them implement and enforce OWTS-related policies and regulations.

In accordance with Section 13260 of the Water Code, anybody proposing to discharge waste that may adversely affect surface waters or groundwater of California must file a report of waste discharge with the local Regional Water Board. OWTS discharge waste, which may adversely affect surface waters and groundwater of the state; therefore, they are subject to regulation by the appropriate Regional Water Board. After considering the report of waste discharge, the Regional Water Board may issue WDRs that may include certain terms and conditions as allowed under Section 13263 of the Water Code and designed to protect beneficial uses and comply with applicable water quality objectives specified in its water quality control plan (or basin plan).



Number	County Name
1	ALAMEDA
2	ALPINE
3	AMADOR
4	BUTTE
5	CALAVERAS
6	COLUSA
7	CONTRA COSTA
8	DEL NORTE
9	EL DORADO
10	FRESNO
11	GLENN
12	HUMBOLDT
13	IMPERIAL
14	INYO
15	KERN
16	KINGS
17	LAKE
18	LASSEN
19	LOS ANGELES
20	MADERA
21	MARIN
22	MARIPOSA
23	MENDOCINO
24	MERCED
25	MODOC
26	MONO

Number	County Name
27	MONTEREY
28	NAPA
29	NEVADA
30	ORANGE
31	PLACER
32	PLUMAS
33	RIVERSIDE
34	SACRAMENTO
35	SAN BENITO
36	SAN BERNARDINO
37	SAN DIEGO
38	SAN FRANCISCO
39	SAN JOAQUIN
40	SAN LUIS OBISPO
41	SAN MATEO
42	SANTA BARBARA
43	SANTA CLARA
44	SANTA CRUZ
45	SHASTA
46	SIERRA
47	SISKIYOU
48	SOLANO
49	SONOMA
50	STANISLAUS
51	SUTTER
52	TEHAMA
53	TRINITY
54	TULARE
55	TUOLUMNE
56	VENTURA
57	YOLO
58	YUBA

Source: SWRCB 2001

Regional Water Quality Control Board and County Boundaries **Exhibit 1**

Water Code Section 13269 allows Regional Water Boards to waive WDRs for specific discharges or types of discharges. Until recently, many WDRs, including those for OWTS, agricultural, and stormwater discharges, were often informally waived by Regional Water Boards. In 2000, amendments to Section 13269 essentially terminated pre-existing waivers beginning January 1, 2003. Pre-existing waivers for OWTS were subsequently continued in effect until June 30, 2004, unless terminated by a Regional Water Board. Any waiver for OWTS adopted or renewed thereafter must be consistent with regulations or standards adopted pursuant to AB 885. In 2003, Section 13269 was further amended by the legislature to require that waivers of WDRs include monitoring to support the implementation of the waiver program. These Water Code amendments affect how Regional Water Boards can implement AB 885. For example, where a local agency seeks and is given authorization to administer implementation of the OWTS regulations, the Regional Water Board would waive waste discharge requirements and additionally require monitoring of OWTS unless it is determined that the discharge does not pose a threat to water quality.

AB 885 provides specific direction from the legislature to the State Water Board to provide uniform requirements related to minimum acceptable operation of OWTS, including standards for the protection of beneficial uses of potentially affected water. Typically, Regional Water Boards have adopted requirements for OWTS in their water quality control plans and have worked with local agencies (counties, cities, and special districts) through a formal or informal agreement. When a Regional Water Board and local agency enter into such an agreement, the local agency commits to help the Regional Water Board implement basin plan requirements at the local level.

The current practice of regulating OWTS has led to inconsistencies among the various Regional Water Boards and among the numerous local agencies in California's 58 counties. For example, while most counties have some type of minimum performance requirements and siting and design requirements specifically for OWTS, siting criteria, exemption criteria, corrective actions, and repair and replacement requirements vary greatly from one jurisdiction to another. In fact, California is one of only two states that do not have statewide OWTS regulations.

The inconsistency in regional and local OWTS requirements and related lack of statewide regulations, along with the public health and environmental issues summarized in Section 2.1.5 of this IS, are the primary reasons why AB 885 was introduced by Assemblymember Hannah Beth Jackson in February 1999, passed by the state legislature, and signed into law by Governor Gray Davis in September 2000.

2.1.2 HIGHLIGHTS OF ASSEMBLY BILL 885 AND RELATED STAKEHOLDER MEETINGS

AB 885 requires the State Water Board to develop statewide OWTS regulations in consultation with the California Department of Health Services (DHS), California Conference of Directors of Environmental Health (CCDEH), California Coastal Commission (CCC), counties, cities, and other interested parties. The State Water Board has held numerous meetings and discussions with agencies and stakeholders such as the U.S. Environmental Protection Agency (USEPA), DHS, CCC, CCDEH, the California Onsite Wastewater Association, the National Onsite Wastewater Recycling Association; and university departments performing related research.

AB 885 further requires the regulations to include, at a minimum, the seven types of requirements listed below (often referred to as AB 885's "seven points"):

1. Minimum operating requirements that may include siting, construction, and performance requirements
2. Requirements for OWTS adjacent to waters listed as impaired under Section 303(d) of the Clean Water Act
3. Requirements authorizing local agency implementation
4. Corrective action requirements
5. Minimum monitoring requirements

6. Exemption criteria
7. Requirements for determining when an existing OWTS is subject to major repair

As previously stated, AB 885 also requires the Regional Water Boards to incorporate the new statewide regulations into their basin plans. Neither the legislation nor the proposed OWTS regulations preempt the Regional Water Boards or any local agency from adopting or retaining performance requirements for OWTS that are more protective of public health or the environment than the new statewide regulations.

The proposed statewide OWTS regulations required by AB 885, included in Appendix C, and related implementation activities are the "proposed project" evaluated under CEQA in this IS and the forthcoming EIR.

2.1.3 CONVENTIONAL OWTS AND THEIR BASIC OPERATIONAL CHARACTERISTICS

OWTS treat wastewater and dispose of effluent for the approximately 1.2 million California households and numerous businesses that are not connected to sewer systems and related centralized municipal wastewater treatment plants (California Wastewater Training and Research Center and U.S. Environmental Protection Agency 2003). Thus, approximately 10% of all California households, or about 3.5 million people, rely upon some type of OWTS to treat and dispose of the wastewater they generate. According to the study cited above, the annual rate of growth in new OWTS installations is approximately 1% or 12,000 systems.

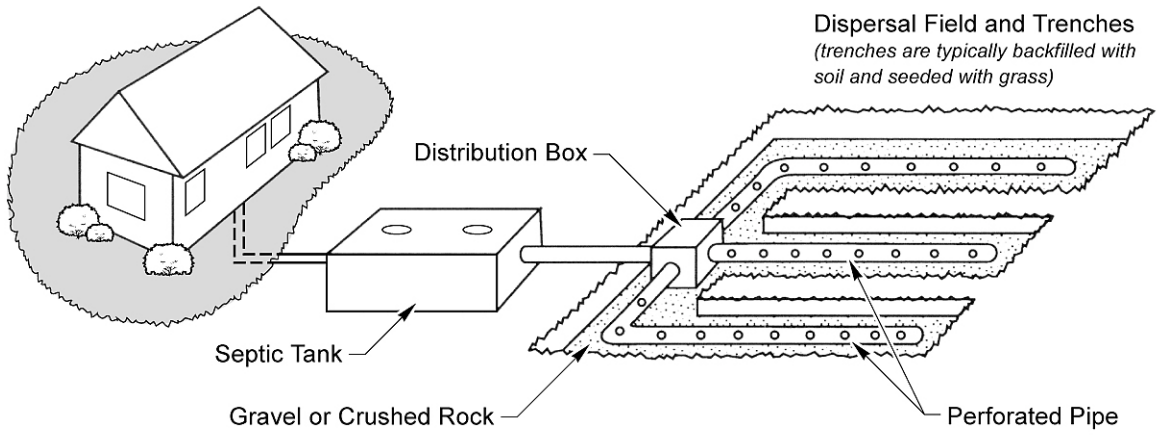
OWTS are defined by USEPA as systems "relying on natural processes and/or mechanical components that are used to collect, treat, and disperse/discharge wastewater from single family dwellings or buildings" (USEPA 2002). Most OWTS are commonly referred to as "septic systems"; however, many different types of systems exist, including conventional systems and a wide range of supplemental treatment systems that are capable of addressing different treatment needs and achieving different treatment levels.

The vast majority of existing OWTS are conventional systems. A conventional OWTS is depicted in Exhibit 2.

A conventional OWTS typically consists of a septic tank and a gravity-driven subsurface dispersal system, such as a leach field or a seepage pit. A conventional system may include septic tank effluent pumping where the dispersal field is located at a higher elevation than the associated septic tank, or a pressure distribution system, a mound system, or an at-grade system. If properly sited (i.e., with suitable soil and groundwater separation conditions), designed, installed, and operated, conventional systems are capable of nearly complete removal of suspended solids, biodegradable organic compounds, and fecal coliform bacteria. However, other pollutants may not be removed to acceptable levels. For example, conventional systems are expected to remove no more than 10–40% of the total nitrogen in domestic wastewater. Other pollutants that may not be removed include pharmaceuticals and other synthetic organic chemicals.

Proper site conditions are an important factor in ensuring the optimal functioning of an OWTS. Key issues that may affect the effectiveness of a treatment system and determine the need for additional treatment are the amount of separation between the bottom of the dispersal field and the level of saturated soil or the groundwater table, and the distance to nearby drinking water wells or surface waters. Private ("domestic") or public drinking water wells may be present on the same property as an OWTS or nearby. Depending on the direction of flow of groundwater, nearby wells may or may not be in the path of the contaminant plume from the OWTS discharge.

If properly sited and under appropriate conditions, unsaturated soil (referred to as the vadose zone) can significantly reduce the levels of human pathogenic organisms (viruses and bacteria) that reach the underlying groundwater table or surface water that is hydrologically connected to the groundwater. The depth and type of unsaturated soil below the dispersal system are important factors in the treatment process. Greater retention time of OWTS wastewater effluent in the vadose zone results in increased removal of pathogens.



Note: This is a schematic diagram that is not to scale

Source: Adapted from EPA 2002

Exhibit 2
Conventional System

2.1.4 SITE CONDITIONS AND USE OF SUPPLEMENTAL TREATMENT OWTS

Deep and biologically active soils with relatively long retention times are ideal conditions for the siting of OWTS. However, such conditions are not present in many areas of California. Areas of the state with relatively sandy soils can allow OWTS effluent to move fairly rapidly into local groundwater and other receiving waters with little retention time in the soil underlying dispersal fields. In areas with underlying fractured and granitic bedrock, it is almost impossible to accurately predict the travel time and likely pathway that OWTS effluent will take before it reaches groundwater. In areas with poorly draining clay soils, OWTS effluent can pool at the surface, thus creating potential public health problems through human contact.

When faced with less-than-ideal hydrogeologic and soil conditions, professional engineers, professional geologists, soil scientists, environmental health specialists, and others who site and design OWTS have an extensive assortment of supplemental treatment options to choose from for supplemental treatment along with dispersal, operational, and maintenance options. For example, in a recent report prepared for the State Water Board by the Department of Civil and Environmental Engineering at the University of California, Davis (UCD), the authors describe numerous types of technologies and OWTS-related management systems, including:

- options for reducing wastewater generation (including conservation),
- containment systems that do not generate waste,
- anoxic and anaerobic systems,
- attached and suspended growth aerobic treatment systems,
- natural treatment systems,
- disinfection systems, and
- monitoring and control systems (modified from Leverenz, Tchobanoglous, and Darby 2002).

The OWTS Regulations EIR will provide more information about conventional and supplemental treatment OWTS and how they operate.

2.1.5 PUBLIC HEALTH AND ENVIRONMENTAL ISSUES

The primary public health and environmental issues of concern associated with the use of OWTS are (1) direct human exposure to OWTS effluent surfacing above an improperly designed dispersal field; (2) degradation of

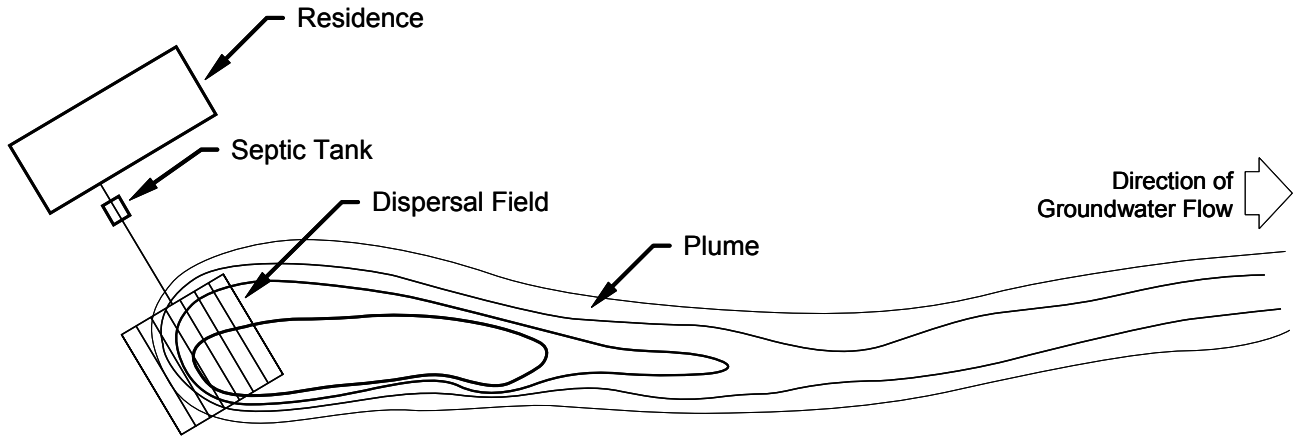
groundwater quality due to percolating OWTS effluent beneath the dispersal field; (3) degradation of surface water by groundwater affected by OWTS effluent; and (4) human exposure to affected groundwater or surface water, either through direct ingestion or through dermal contact.

DIRECT HUMAN EXPOSURE TO SURFACING EFFLUENT

Most "failures" of OWTS are reported as surfacing effluent above the dispersal field, allowing for the possibility of direct human contact with minimally treated sewage. The causes of such failures may be due to clogging of the dispersal system or the inability of soils in the OWTS dispersal field to percolate effluent downward. To avoid surfacing effluent, OWTS should be designed and sited to (1) prevent solids from passing from the septic tank to the dispersal field and (2) ensure that effluent application rates and soil conditions in the dispersal field will allow percolation.

GROUNDWATER DEGRADATION

In most hydrogeologic settings in California, percolating effluent from OWTS will reach groundwater. Once reaching the groundwater table, the OWTS effluent will move with groundwater flow as a contaminant plume. In general, contaminant plumes tend to be long, narrow, definable and exhibit little dispersion (USEPA 2002; see Exhibit 3). Groundwater within the contaminant plume will likely exceed water quality objectives for nitrate from conventional OWTS effluent and contain other dissolved contaminants or pathogens (viruses and/or bacteria) not removed by the OWTS.



Source: Adapted from USEPA 2002

Exhibit 3
Example of OWTS Effluent Plume Movement

SURFACE WATER DEGRADATION

OWTS effluent groundwater plumes and surfacing effluent from OWTS dispersal systems reaching adjacent surface water bodies (streams, lakes, marine waters) can cause pollution and endanger public health. The most common water quality objectives exceeded in surface waters due to OWTS discharges are for nitrogen and bacteria. Public health concerns are commonly associated with recreational contact of surface waters impaired by OWTS discharges.

HUMAN EXPOSURE TO OWTS-DEGRADED GROUNDWATER

Typical local codes specify a minimum 100-foot separation between an OWTS and a domestic drinking water well. OWTS effluent plumes in groundwater tend to remain relatively intact over long distances (for example, as reported in USEPA 2002, a 1995 study by Robertson and Cherry determined that such plumes can remain narrow and concentrated for more than 300 feet). In a fractured rock environment, OWTS effluent may travel much longer distances in rock fractures without dilution. Therefore, domestic water supply wells are vulnerable to contamination from OWTS effluent plumes. The degree of possible impact is dependent on a variety of factors, including local hydrogeology and whether hydrogeologic barriers (e.g., clay or hardpan) exist that separate shallow groundwater from the water-bearing zone from which the domestic well draws water, the degree to which the domestic well casing reaches and is sealed into a hydrogeologic barrier that prevents or impedes the downward migration of shallow groundwater, and the length and adequacy of the sanitary seal (if one exists) on the domestic well. Note that in fractured rock, hydrogeologic barriers do not exist and sanitary seals may be less protective than a groundwater table environment.

California has a large number of domestic drinking water wells (approximately 600,000, extrapolated from 1990 U.S. Census data) that may be vulnerable to contamination from the discharges of existing or yet-to-be-installed OWTS. While public wells are also vulnerable to contamination, they (unlike private wells) are tested regularly, are required to meet water quality standards, and often provide water that is subjected to additional treatment that protects consumers.

Table 1 summarizes the major types of pollutants found in OWTS discharges and briefly describes the primary reasons why pollutants such as pathogens and nitrogen are a concern.

2.1.6 ECONOMIC AND FISCAL ISSUES

OWTS are commonly financed as part of the construction costs of a new home or business. Conventional OWTS are the most common and generally least expensive systems to construct; supplemental treatment systems are becoming more commonplace in some areas of the state but also tend to be more expensive. In fact, the cost of installing supplemental treatment OWTS has been at least twice that of conventional OWTS. For example, the design, siting, and installation of conventional OWTS for residential construction projects typically range from $8,000 to $15,000, while supplemental treatment OWTS can cost $20,000–$30,000 or more depending on site conditions and which system is installed (Treinen, Bradley, and Lescure, personal communications, 2004).

Homeowners and business owners incur costs when they have to replace or repair an existing system. Lower income residents may have difficulty covering expensive repair or replacement costs.

AB 885 says it is the intent of the California legislature to provide private property owners with financial assistance for OWTS-related costs under certain situations and encourages the use of the State Revolving Fund Loan Program to address this concern.

2.2 PROJECT OBJECTIVES

Based on the requirements of AB 885 and the intent of the state legislature in drafting the legislation, and in the context of other state laws relating to wastewater discharge and water quality, the State Water Board has identified the following objectives for the proposed project:

1. As required by AB 885, adopt statewide OWTS regulations that are consistent with other provisions of the Porter-Cologne Water Quality Control Act and related state water quality control plans and policies adopted by the State Water Board.

Table 1
Typical Wastewater Pollutants of Concern

Pollutant	Reason for Concern
Total suspended solids (TSS) and turbidity (NTU)	In surface waters affected by surfacing OWTS effluent, suspended solids can result in the development of sludge deposits that smother benthic macroinvertebrates and fish eggs and can contribute to benthic enrichment, toxicity, and sediment oxygen demand. Solids also harbor bacteria. Excessive turbidity resulting from solids that remain suspended can block sunlight, harm aquatic life (e.g., by blocking sunlight needed by plants), and lower the ability of aquatic plants to increase dissolved oxygen in the water column. In drinking water, turbidity is aesthetically displeasing and interferes with disinfection.
Biological oxygen demand (BOD)	Biological stabilization of organics in the water column can deplete dissolved oxygen in surface waters, creating anoxic conditions harmful to aquatic life. Oxygen-reducing conditions in groundwater and surface waters can also result in taste and odor problems in drinking water.
Pathogens	Parasites, bacteria, and viruses can cause communicable diseases through direct and indirect body contact or ingestion of contaminated water or shellfish. A particular threat occurs when OWTS effluent pools on the ground surface or migrates to recreational waters. Transport distances of some pathogens (e.g., viruses and bacteria) in groundwater or surface waters can be significant.
Nitrogen	Nitrogen is an aquatic plant nutrient that can contribute to eutrophication and dissolved oxygen loss in surface waters, especially in lakes, estuaries, and coastal embayments. Algae and aquatic weeds can contribute trihalomethane (THM) precursors to the water column that may generate carcinogenic THMs in chlorinated drinking water. Excessive nitrate-nitrogen in drinking water can cause methemoglobinemia in infants and pregnancy complications for women. Livestock can suffer health impacts from drinking water high in nitrogen.
Phosphorus	Phosphorus is an aquatic plant nutrient that can contribute to eutrophication of inland and coastal surface waters and reduction of dissolved oxygen.
Toxic organic compounds	A variety of regulated organic compounds exist that cause direct toxicity to humans and aquatic life via skin contact and ingestion. Organic compounds present in household chemicals and cleaning agents can interfere with certain biological processes in alternative OWTS. They can be persistent in groundwater and contaminate downgradient sources of drinking water. Some organic compounds accumulate and concentrate in ecosystem food chains.
Heavy metals	Heavy metals like lead and mercury in drinking water cause human health problems. In the aquatic ecosystem, they are also toxic to aquatic life and accumulate in fish and shellfish that might be consumed by humans.
Dissolved inorganic compounds	Chloride and sulfide cause taste and odor problems in drinking water. Boron, sodium, chlorides, sulfate, and other solutes may limit treated wastewater reuse options (e.g., irrigation). Sodium and to a lesser extent potassium can be deleterious to soil structure and OWTS dispersal system performance.
Endocrine disruptor compounds (EDCs)	The presence of common hormones, drugs, and chemicals contained in personal care products (e.g., shampoo, cleaning products and pharmaceuticals) in wastewater and receiving water bodies is an emerging water quality and public health issue. Endocrine disruptor compounds (EDCs) are substances that alter endocrine system function and consequently cause adverse health effects to organisms or their progeny. Only recently has it been recognized that EDCs are present in water bodies of the U.S. at a high frequency; however, measured concentrations have been low and usually below drinking water standards for compounds having such standards. Specific studies have found EDCs in sufficient quantity that they could potentially cause endocrine disruption in some fish. The extent of human health risks and dose responses to EDCs in concentrations at the low levels found in the environment are still unknown.

Source: Adapted from USEPA 2002 and Tchobanoglous and Burton 1991.

2. Help ensure beneficial uses of the State's waters are protected from OWTS effluent discharges by achieving and protecting water quality objectives.

3. Establish an effective implementation process that considers economic costs, practical considerations for regional and local implementation, and technological capabilities existing at the time of implementation.

2.3 PROPOSED PROJECT

This section describes the major elements of the proposed project using a bulleted format and the "seven points" from AB 885 (i.e., the seven types of requirements that the state legislature determined must be included, at a minimum, in the new statewide OWTS regulations). Section references in the subheadings below are references to specific sections in the proposed draft regulations included in Appendix C.

As required by AB 885, the implementation of new statewide OWTS regulations will commence six months after the regulations are adopted by the State Water Board. The current State Water Board rulemaking schedule assumes that these regulations will be adopted by the summer of 2006. Therefore, the regulations will be implemented in early 2007, with the exception of some specific requirements for water bodies listed as impaired under Section 303(d) of the Clean Water Act. Those waters and related implementation timeframes are addressed under Point 2, Section 2.3.2 of the IS below.

The proposed regulations would continue to rely upon the regional water boards for regional and local implementation. As they do now, the regional water boards may enter into formal agreements with authorized local agencies (ALAs) to allow ALAs to implement and enforce the proposed regulations summarized in this section. The proposed regulations would not prevent regional water boards or ALAs from adopting their own OWTS requirements that are at least as protective of the environment and public health as the proposed regulations; the proposed regulations would be the minimum requirements for OWTS installation, operation, and maintenance throughout the state.

As required by AB 885, the proposed regulations would apply to all of the following types of OWTS:

- any system that is constructed or replaced;
- any system that is subject to a major repair (as defined in the proposed regulations);
- any system that pools or discharges effluent to the surface; and
- any system that, in the judgment of a Regional Water Board or ALA, has the reasonable potential to cause a violation of water quality objectives or to impair present or future beneficial uses of water, or to cause pollution, nuisance, or contamination of the waters of the state.

In some cases, such as groundwater monitoring and septic tank inspections, the proposed regulations would impose new requirements. In other cases, elements of the proposed regulations may already be in use at the regional or local level, but may vary around the state. The EIR will define the existing regulatory setting at the regional and local levels in more detail and will provide examples of representative regulations from various areas for comparative purposes.

2.3.1 POINT 1: MINIMUM OPERATING REQUIREMENTS

The subsections that follow summarize the minimum operating requirements contained in the proposed regulations; these include siting, construction, and performance requirements. Operating permits for new conventional systems are not required in the proposed regulations if the Regional Water Board or ALA does not otherwise require them. The regulations require new operating permits for all new OWTS with supplemental

treatment units or those OWTS subject to major repair that incorporate supplemental treatment units. (The term "major repair" is defined under Point 7, Section 2.3.7 of the IS below.) The operating permits would be transferred during real estate transactions from the previous OWTS owner to the new owner of the permitted OWTS.

SITE EVALUATION REPORTS TO BE SUBMITTED WITH PERMIT APPLICATIONS (SEE SECTIONS 22901 AND 22955)

All persons intending to construct, repair, or replace any OWTS would be required to prepare and submit a site evaluation report with their permit application (if the Regional Water Board or ALA requires an application). Such applications would be submitted to the appropriate Regional Water Board or ALA and must follow extensive content requirements as specified in Section 22955. These site evaluation report requirements only apply to property owners or their representatives within the jurisdiction of Regional Water Boards or ALAs that require permit applications for OWTS.

ADDITIONAL REQUIREMENTS FOR ALL SYSTEMS, INCLUDING EXISTING OWTS (SEE SECTION 22910[C])

OWTS effluent must be below "high-strength waste" levels and OWTS may not:

- discharge effluent to land surface,
- become a source of disease vectors (e.g., insects or rodents), or
- be the source of nuisance odors.

ADDITIONAL REQUIREMENTS FOR NEW SYSTEMS AND SYSTEMS SUBJECT TO MAJOR REPAIR (SEE SECTION 22910)

The requirements listed in Section 22910 apply to all new OWTS and to existing systems subject to major repair, which include but are not limited to OWTS that are in a failure condition. Specific definitions for "major repair," "failure" and "new OWTS" are included in Section 22900, along with other important definitions. System failure includes conditions where OWTS effluent is causing a nuisance or health hazard or where such effluent is causing a violation of applicable water quality objectives. Some of the requirements in Section 22910 summarized below also apply to OWTS on existing properties undergoing transfer of ownership.

Other requirements included in this section of the proposed regulations are highlighted below:

- The appropriate characteristics of wastewater from OWTS are those associated with domestic wastewater, commercial wastewater that excludes hazardous waste, nonresidential wastewater pretreated to be below high-strength wastewater levels, and nonresidential wastewater with pollutants segregated. Chemical wastes from holding tanks, recreational vehicles, and portable toilets are excluded.

- OWTS shall be designed to remove or reduce biological oxygen demand (BOD), total suspended solids (TSS), and pathogenic organisms (such as coliform bacteria).

- OWTS shall be designed to prevent solids greater than 1/8 inch in diameter from passing to the dispersal system. The use of certain septic tank filters can allow property owners to comply with the requirements of this section.

- Systems shall disperse effluent to subsurface soils in a manner that provides unsaturated zone treatment and aerobic decomposition of effluent.

- Only "qualified professionals," as defined in Section 22900, can evaluate or design new and repaired OWTS. Such professionals must also prepare operations and maintenance manuals for property owners along with a "Record Plan" to help ensure that OWTS are properly operated and maintained. Only licensed contractors (Class A or Specialty Class C-42) may construct new OWTS.

- All owners of septic tanks must have their tanks inspected by a qualified service provider upon transfer of property ownership to ensure the tank is performing properly.

- All OWTS owners with domestic wells on their properties, or with domestic wells adjacent to their properties, must monitor groundwater in the vicinity of the OWTS discharge upon installation of a new OWTS or transfer of property ownership. Groundwater samples must be collected and analyzed either from groundwater monitoring wells that are down-gradient from the OWTS or from an onsite domestic well. This requirement is waived if no domestic well is located on-site and property owners deny access to adjacent domestic wells. Section 22910(v) includes requirements related to how the groundwater samples would be analyzed. Certified laboratories analyzing the water samples would report the results electronically to the State Water Board's groundwater database. Homeowner name and address information would not be accessible to the general public. Section 22910(u) of the proposed regulations contains a number of conditions that would exempt OWTS owners from this requirement; these conditions are summarized in Section 2.3.5 below.

- Where natural percolation rates are high (less than 5 minutes per inch) and there is less than 5 feet of separation to seasonal high groundwater below the dispersal area, the effluent from new OWTS shall use supplemental treatment to help ensure pathogen reductions occur.

SEPTIC TANK SPECIFICATIONS (SEE SECTION 22911)

This section of the proposed regulations includes a number of technical specifications that new or replaced septic tanks must meet.

REQUIREMENTS FOR SUPPLEMENTAL SYSTEMS (SEE SECTION 22912)

This section applies to all new OWTS using supplemental treatment systems. Key elements of this section include the following:

- There must be at least 2 feet of unsaturated soil below the dispersal system and above seasonal high groundwater or impermeable strata or fractured/weathered bedrock.

- The effluent must meet a number of specified performance requirements prior to entering the dispersal field (the 30-day average of the samples shall not exceed 30 mg/l BOD [or alternately, 25 mg/l CBOD] and 30 mg/l TSS.

- Where nitrogen is a water quality concern, the effluent must meet a 10-mg/l nitrogen standard before it enters the dispersal field.

- All supplemental treatment components must be certified by a third-party testing laboratory or designed by a registered professional engineer.

- Effluent, before discharge to the dispersal field, must be evaluated at least on a quarterly basis and a representative sample must be analyzed by a laboratory certified by the California Department of Health Services (DHS).

- All owners of supplemental treatment OWTS must obtain an operating permit from the Regional Water Board or ALA. Such permits shall require permit holders to maintain contracts with qualified service providers for the operation, maintenance, and monitoring of the OWTS.

REQUIREMENTS FOR NEW DISPERSAL SYSTEMS (SEE SECTION 22914)

New requirements in this section of the proposed regulations include the following:

- Qualified professionals shall "exercise all feasible design options to assure that the base of the dispersal system lies at the shallowest practicable depth at or below the original elevation of the soil surface to maximize elements critical to effective treatment of effluent in the soil (e.g., oxygen transfer, biological treatment, and vegetative uptake of nutrients)" (Section 22914[a]).

- New conventional systems must have 5 feet of continuous unsaturated soil below the dispersal system and above seasonal high groundwater or fractured/weathered bedrock, unless determined otherwise by the ALA or Regional Water Board. These agencies may allow less than 5 feet, but not less than 3 feet, if a qualified professional can demonstrate that water quality in the immediate vicinity will not be impaired by pathogens from the OWTS.

- Specific dispersal systems have prescriptive requirements, including vertical separation and unsaturated soil depths, and design application rates.

- Dispersal systems with pumps must have failure alarms and be able to deal with 24 hours of failure without overflow or bypass.

2.3.2 POINT 2: REQUIREMENTS FOR IMPAIRED WATERS, INCLUDING CLEAN WATER ACT SECTION 303(D)-LISTED WATERS (SEE SECTIONS 22940 AND 22945)

Section 22940 includes requirements that pertain to all OWTS within 600 feet of impaired surface water (as defined in Section 303[d] of the federal Clean Water Act) and where OWTS have been identified by a Regional Water Board as contributing to the specific impairment of that surface water. The ALA or Regional Water Board may establish a greater or lesser distance requirement than 600 feet based upon the results of a groundwater monitoring report. Some of these requirements are proposed to take effect in January 2007 and others are proposed to take effect in January 2009, but all of them involve mandatory use of supplemental treatment. The specific performance requirements that apply to the required supplemental treatment vary, depending on whether nitrogen or pathogens are the reason OWTS are contributing to impairment of surface water. These dates can be extended if total maximum daily load standards (TMDLs) are expected to be adopted by January 31, 2009, but the TMDL implementation dates cannot be extended beyond December 31, 2015. OWTS owners committing to connect to community wastewater systems by the end of 2015 are exempt from this section's requirements under certain conditions.

In areas where OWTS have been identified by a Regional Water Board as contributing to groundwater impairment (i.e., a violation of water quality objectives) or contamination, the ALA and Regional Water Board shall identify corrective actions and an implementation schedule. Corrective actions to be considered may include, but are not limited to, those listed below from Section 22945:

- Increased oversight of OWTS
- Preparation of a cumulative impact analysis
- Use of a centralized wastewater collection system
- Enactment of a building moratorium
- Mandate for the use of supplemental treatment for new and existing OWTS

2.3.3 POINT 3: REQUIREMENTS AUTHORIZING LOCAL IMPLEMENTATION

The proposed regulations allow cities, counties, or other responsible management agencies (referred to as ALAs) to administer the new OWTS regulations by entering into an MOU with the Regional Water Board, or through an adopted resolution by the Regional Water Board. Once this relationship is authorized, implementation by the ALA must be reviewed by the Regional Water Board every 5 years and can be terminated by the Regional Water Board with 90 days' notice.

2.3.4 POINT 4: REQUIREMENTS FOR CORRECTIVE ACTIONS

Under the proposed regulations, ALAs or Regional Water Boards would notify OWTS owners of noncompliance with the proposed regulations and direct corrective action within a specified time (Section 22902). Also, as described in Section 2.3.2 regarding Point 2 above, Sections 22940 and 22945 of the proposed regulations identify corrective actions that may be taken in areas with impaired surface water or groundwater.

2.3.5 POINT 5: MINIMUM MONITORING REQUIREMENTS

Section 22910(u) of the proposed regulations requires owners of OWTS with on-site domestic wells on their properties, or with domestic wells adjacent to their properties, to sample and analyze groundwater quality in the vicinity of the OWTS discharge; this requirement applies upon installation of new OWTS or transfer of ownership of properties containing OWTS. The Regional Water Board may also require groundwater monitoring prior to property transfers, or at any other time, when the Regional Water Board has reason to believe an OWTS-related water quality problem exists.

Monitoring that is carried out either for installation of a new OWTS or upon transfer of property ownership will provide a level of information not now available and the level of information will increase each year. Given the uncertainty of property transfers, the level of information provided may vary greatly from place to place and from year to year. Since more densely populated areas will have more transfers, monitoring should occur more often in areas posing a higher water quality threat. While such a monitoring effort appears consistent with Water Code Section 13269(a)(2) and (3), it can be argued that a more comprehensive monitoring effort is needed.

Exemptions from groundwater monitoring would be allowed if any of these conditions apply:

- The facility served by the OWTS gets its drinking water from a community water supply system.
- With the concurrence of the Regional Water Board, a study indicates that no violation of water quality objectives from the OWTS discharge is anticipated over the life of the OWTS.

As noted in Section 2.3.1 regarding Point 1 above, Section 22912(f) of the proposed regulations requires supplemental treatment systems to undergo effluent monitoring on a quarterly basis, or more frequently.

Section 22910(s) would require owners of OWTS to have their septic tanks inspected upon transfer of property ownership, and Section 22910(t) would require visual inspections of systems for malfunctions whenever septic tanks are pumped. Sections 22910(p) and (q) allow ALAs and Regional Water Boards to inspect any OWTS permitted under the new regulations or to evaluate their performance.

2.3.6 POINT 6: EXEMPTION CRITERIA

In accordance with Section 22947, the proposed regulations would allow each Regional Water Board to amend its water quality control plan (basin plan) to establish criteria and procedures for exemptions to the new regulations;

however, such exemptions may not be less protective of water quality or human health than the proposed regulations would be (if adopted).

Criteria for exemptions to the groundwater monitoring requirements are described in Section 2.3.5 addressing Point 5 above.

2.3.7 POINT 7: REQUIREMENTS FOR DETERMINING WHEN A SYSTEM IS SUBJECT TO MAJOR REPAIR

Major repair is defined in Section 22900 of the proposed regulations as enlargement of an OWTS or corrective work needed to correct a condition of failure. "Failure" is defined in the same section as a condition where an OWTS "causes or threatens to cause impairment of beneficial uses of surface water or groundwater or threatens public health." Examples of failures include:

- Domestic wastewater backing up into a structure caused by slow soil absorption of septic tank effluent or a mechanical malfunction;
- Domestic wastewater from an OWTS discharging to the ground surface or groundwater and causing pollution or nuisance or posing an immediate health hazard; and
- Violation of water quality objectives for surface water or groundwater as established in basin plans.

2.4 ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the State CEQA Guidelines requires that a draft EIR must describe a reasonable range of alternatives to the proposed project that could feasibly enable the project's basic objectives to be met while substantially reducing or avoiding any of the significant environmental effects of the proposed project. This section describes the alternatives to the proposed project that are proposed for evaluation in the EIR. These alternatives will be defined in more detail and assessed in the EIR. They have been identified by the State Water Board using input received from a number of stakeholder meetings and other discussions with stakeholders, including conversations with the Regional Water Boards and local, state, and federal agencies. Additional comments received during the EIR's scoping process will be used by the State Water Board to determine if the alternatives described below are sufficient as defined, if any of the alternatives should be modified, or if additional alternatives should be considered in the EIR.

The alternatives to the proposed project described in the subsections that follow include two alternative regulatory approaches, alternative regulations proposed by one of the major stakeholder groups (CCDEH), and two No-Project Alternatives.

The State Water Board believes that the proposed project, the other regulatory alternatives described below, and the two No-Project Alternatives adequately cover the full range of alternatives needed "to foster meaningful public participation and informed decision making" and should be sufficient to "permit a reasoned choice" (as required by State CEQA Guidelines Section 15126.6[f]).

2.4.1 NO-PROJECT ALTERNATIVE WITH STATUS QUO

As noted in Section 15126.6(e)(1) of the State CEQA Guidelines, "the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." The impacts of not approving the proposed project would depend on which of two different but possible scenarios would take place if the proposed project is not adopted and implemented. The first possible scenario would involve continuation of the status quo as further described in this section.

Because AB 885 (Water Code Section 13291) requires the State Water Board to develop new statewide regulations, the No-Project Alternative with Status Quo assumes that the state legislature would pass new legislation that is signed by the Governor and voids the requirement to develop new statewide OWTS regulations.

Under the No-Project Alternative with Status Quo, the existing regulatory setting would continue into the future. No new statewide OWTS regulations would be implemented; existing requirements in Regional Water Board basin plans and local agency ordinances and policies would continue to vary from one jurisdiction to another and would be the primary means by which OWTS are regulated. Other important assumptions that will be used to define the No-Project Alternative with Status Quo in the EIR are listed below.

- The TMDL water quality standards development process already underway, and led by the Regional Water Boards, may lead to additional restrictions on OWTS discharges adjacent to 303(d)-listed surface water bodies. New requirements for OWTS adjacent to Clean Water Act Section 303(d)-listed waters, or contributing to their impairment, would not be implemented under this alternative.

- As noted above, OWTS siting, design, and construction requirements would continue to vary considerably among local agencies and Regional Water Boards. Other key elements of regional and local requirements also would continue to vary: corrective actions, exemption criteria, minimum monitoring requirements, and requirements for determining when a system is subject to major repair.

2.4.2 NO-PROJECT ALTERNATIVE WITH STATEWIDE REQUIREMENTS

Because the state legislature may not wish to pass new legislation that supersedes AB 885 and removes the statewide regulations requirements of Water Code Section 13291, a second No-Project Alternative will also be defined and addressed in the EIR. The No-Project Alternative with Statewide Requirements assumes that the State Water Board would still need to meet the AB 885 requirement to develop new statewide OWTS requirements, even if it does not adopt and implement the proposed project being evaluated in the EIR. However, much uncertainty surrounds what course of action the State Water Board would take under such a scenario, and the State Water Board's other possible courses of action are already well-represented by the other project alternatives described below. Therefore, the EIR will likely include only a brief assessment of this No-Project Alternative since this alternative is speculative and a detailed analysis would not be meaningful. In other words, it is not possible to predict what regulations might be adopted and implemented in lieu of the regulations proposed as part of the proposed project or instead of those that would be associated with the other alternatives described below.

2.4.3 PRESCRIPTIVE ALTERNATIVE

GENERAL REGULATORY APPROACH AND MINIMUM OPERATING REQUIREMENTS

The prescriptive regulatory approach is often called the "one size fits all" approach with respect to conventional systems. Although this is an oversimplification, this approach puts a heavy emphasis on standard and extensive requirements for conventional OWTS and is primarily based on the existing California Plumbing Code. Many of this alternative's prescriptive requirements are already in place in most of California's counties. Similar to the proposed project, this alternative relies on prescriptive requirements for conventional OWTS and performance requirements when conventional OWTS cannot be used. Unlike the proposed project, this alternative has more extensive prescriptive requirements for siting, designing, and constructing conventional systems and also differs in other respects as summarized below. This alternative is represented by an early draft of the OWTS regulations distributed to stakeholders in January 2003.

The following sections highlight how this alternative would vary from the proposed project in other respects. Unless otherwise noted, the other elements of this alternative would be the same as or similar to the corresponding elements of the proposed project.

REQUIREMENTS RELATED TO CLEAN WATER ACT 303(D)-LISTED WATERS

Where nitrogen or bacteria from OWTS have been shown to contribute to the impairment of a 303(d)-listed water body, this alternative would require the owners of OWTS to take steps to reduce the amount of pollutants being discharged, as required by the ALA or Regional Water Board. Unlike the proposed project, this requirement would not be limited to OWTS within 600 feet of an impaired water body, but would apply to all OWTS that can potentially contribute to impairment of the water body in question.

MINIMUM MONITORING REQUIREMENTS

While this alternative does not include the groundwater monitoring requirements included in the proposed project, it does include various types of operating inspections, including inspection of effluent filters, certain types of dispersal systems, and grease interceptors. The time intervals for the different types of inspections would vary by system component and would be specified in an operations and maintenance manual. This alternative does not include ongoing inspections of existing or new septic tanks.

2.4.4 PERFORMANCE AND MONITORING ALTERNATIVE

GENERAL REGULATORY APPROACH AND MINIMUM OPERATING REQUIREMENTS

As with the proposed project and other EIR alternatives described in this section, this alternative relies on performance requirements for supplemental treatment OWTS, but differs from the other alternatives in a number of ways. Unlike the proposed project which requires groundwater monitoring and septic tank inspections upon transfer of property ownership, this alternative would establish mandatory and periodic groundwater monitoring and septic tank inspections. This alternative would also require all new OWTS, along with existing conventional systems undergoing major repair, to include supplemental treatment units by 2009. Finally, all existing OWTS would need to be upgraded with supplemental treatment units within 15 years from the date the regulations are adopted by the State Water Board. The following sections provide additional information regarding how this alternative would vary from the proposed project. Unless otherwise noted, the other elements of this alternative would be the same as or similar to the corresponding elements of the proposed project.

REQUIREMENTS FOR CORRECTIVE ACTIONS

As with the other alternatives, this alternative would require ALAs or Regional Water Boards to notify the owners of failing OWTS and would require them to take corrective actions. This alternative differs in that the corrective actions themselves would likely involve requiring the owners of both new conventional and new supplemental treatment OWTS to comply with performance requirements (while the other alternatives would require the owners of conventional systems to comply with prescriptive requirements). Since new or repaired conventional systems would likely have trouble complying with performance requirements, most owners of such conventional systems would likely have to augment those systems with supplemental treatment units.

MINIMUM MONITORING REQUIREMENTS

Like several of the other alternatives, this alternative requires monitoring of supplemental treatment effluent at a point prior to discharge to the dispersal field. Unlike the other alternatives, this alternative includes ongoing inspections of existing or new septic tanks every five years.

This alternative would require owners of OWTS with onsite domestic wells to sample and analyze groundwater quality in the vicinity of the OWTS discharge using the same reporting requirements as contained in the proposed project. For existing systems, such sampling would begin within 2 years of the regulations' implementation; for new systems, this would begin within 30 days of installation. Thereafter, such sampling would be required for all

conventional OWTS every 5 years. This level of monitoring has been deemed to satisfy the monitoring requirements for waivers pursuant to Water Code Section 13269.

REQUIREMENTS FOR DETERMINING WHEN A SYSTEM IS SUBJECT TO MAJOR REPAIR

As with all of the other alternatives that include the implementation of new statewide regulations, this alternative includes a definition of what constitutes a "major repair." This alternative differs, however, in that owners of conventional systems that fail (the primary circumstance under which a major repair is required) would be required to meet more stringent performance requirements (as described above in "Requirements for Corrective Actions").

2.4.5 CCDEH ALTERNATIVE REGULATIONS

This alternative was distributed to a stakeholder group by CCDEH in February 2003 as a CCDEH-proposed replacement for the State Water Board's January 2003 draft regulations. The primary areas in which this alternative differs from the alternatives described above are summarized below.

GENERAL REGULATORY APPROACH AND MINIMUM OPERATING REQUIREMENTS

As with all of the other alternatives that include new statewide OWTS regulations, except for the Performance and Monitoring Alternative, this alternative uses prescriptive requirements for conventional systems and performance requirements for supplemental treatment systems. This is the only alternative that includes a "model" or "standard" MOU to be used by all Regional Water Boards for delegation of some of their OWTS regulatory authority to ALAs.

REQUIREMENTS RELATED TO CLEAN WATER ACT SECTION 303(D)-LISTED WATERS

The CCDEH Alternative would require any OWTS "adjacent to" a Section 303(d)-listed water body to be designed to achieve treatment of the pollutant of concern, with specific actions described in the proposed regulations. The key term "adjacent to" is defined as within 250 feet of the impaired water body, or as otherwise designated by the Regional Water Board.

MINIMUM MONITORING REQUIREMENTS

This alternative does not include groundwater quality monitoring or ongoing inspections of existing or new septic tanks, as included in the proposed project. This alternative includes unspecified monitoring for OWTS that have renewable operation permits (e.g., OWTS with supplemental treatment units).

EXEMPTION CRITERIA

This alternative requires the Regional Water Boards to define exemption criteria in the standard MOU to be used with ALAs. The standard MOU would also define the process by which Regional Water Boards would apply the criteria and grant exemptions.

3 POTENTIAL ENVIRONMENTAL IMPACTS

3.1 INTRODUCTION

This section lists the basic assumptions used to prepare the IS. This analysis was conducted to help determine which environmental issues should be the focus of the OWTS EIR. The assumptions listed below also are proposed to be used while preparing the EIR.

1. Under current conditions, the State does not regulate the manner in which OWTS are constructed. OWTS are constructed in accordance with local ordinances and policies governing development within the relevant jurisdiction. The only regulatory authority imposed by the State relates to the water quality of OWTS effluent and how it interacts with site conditions and, ultimately, the environment. The proposed regulations likewise would not affect how local agencies permit projects with OWTS and the construction of OWTS, except as it relates to issues surrounding effluent quality. Construction processes would still be required to follow local ordinances and policies.

2. Because construction of OWTS would continue to be subject to the same local controls as under current conditions, the environmental impacts of constructing new OWTS would not be altered by the proposed regulations, except to the extent the new regulations could result in additional construction activities or different methods of construction, or result in different effluent quality. Further, there are no provisions in AB885 that would halt installation of OWTS in the absence of adoption of proposed regulations. Consequently, it is assumed that OWTS can continue to be installed under the current regulatory scheme up to the time that new regulations are adopted. The focus of the environmental analysis, then, is on (a) the changes to the environment resulting from changes in water quality from OWTS discharges under the proposed regulations and (b) how OWTS construction occurs under current regulations compared to how such construction would occur under the proposed regulations.

3. The proposed project would likely gradually increase the number of supplemental treatment systems and community collection systems installed over time relative to the number of conventional systems that are installed. This gradual shift would likely occur as new OWTS installations occur and as existing systems are repaired and replaced if the new regulations:

    - are more restrictive/protective of the environment than the existing OWTS regulations of ALAs and regional water boards they would replace, and

    - lead to more frequent corrective actions to protect groundwater, as required by Section 22945 of the proposed regulations, “Provisions for Protecting Impaired Groundwater.”

As required by AB 885, the proposed project would lead to a uniform approach for regulating OWTS throughout the state. Regional water boards and ALAs will retain the authority to require levels of protection that exceed those associated with the proposed regulations.

The State Water Board will use comments received during the EIR’s scoping process to update the assumptions listed above if necessary and to ensure they adequately reflect the proposed project’s range of potential impacts.

Based upon the results of the preliminary impact assessment that follows, the EIR will focus on the resource areas listed below.

- Hydrology (including groundwater and surface water hydrology)

- Geology and soils

- Water quality (including nitrates, pathogens, hazardous materials and other contaminants found in OWTS effluent)
- Public health
- Biology (focusing on biological resources associated with aquatic, wetland, and riparian habitats)
- Utilities and service systems
- Growth inducement (including the proposed project's potential to induce or restrict growth)
- Cumulative impacts (focusing on how the proposed project may contribute to cumulative impacts along with past, existing or reasonably foreseeable related actions by others)

The preliminary environmental assessment that follows identified the issue topics listed below as those that would not be significantly affected by the proposed project. Therefore, the EIR will not address these topics in detail.

- Aesthetics
- Agricultural resources
- Air quality
- Terrestrial biological resources (i.e., those resources not dependent on aquatic, riparian or wetland habitat types)
- Cultural resources
- Hazardous materials (i.e., those materials that are not included in OWTS discharges to groundwater)
- Land use and planning
- Mineral resources
- Noise
- Population and housing (potential effects on population growth will be covered in the EIR section on potential growth-inducing impacts)
- Recreation
- Transportation/Traffic

The EIR also will address potential economic and fiscal effects, including potential increases in OWTS design, siting, and installation costs that may be incurred by some OWTS owners. Other examples of potential economic effects to be addressed include the potential costs associated with OWTS permitting and groundwater monitoring, along with potential beneficial income and employment effects for the companies that provide OWTS-related services, or collect and analyze well samples. Potential fiscal effects on state, regional and local agencies also will be assessed, including potential changes in agency staffing needs, revenues or expenditures.

3.2 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION		
1.	Project Title:	Statewide On-site Wastewater Treatment Systems Regulations
2.	Lead Agency Name and Address:	State Water Resources Control Board, Division of Water Quality, P.O. Box 2231, Sacramento, CA 95812
3.	Contact Person and Phone Number:	Todd Thompson, P.E., (916) 341-5518
4.	Project Location:	Statewide
5.	Project Sponsor=s Name and Address:	Same
6.	General Plan Designation:	Not applicable
7.	Zoning:	Not applicable
8.	Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.) See Chapter 2, "Background and Description of Proposed Project"	
9.	Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)	Statewide
10:	Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)	None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☒ Geology / Soils
☒ Hazards & Hazardous Materials	☒ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☒ Utilities / Service Systems	☒ Mandatory Findings of Significance	☐ None With Mitigation

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☐

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☒

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Original Signed by	6/08/05
Signature	Date
Stan Martinson	Chief, Division of Water Quality
Printed Name	Title
State Water Resources Control Board	
Agency	

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   the significance criteria or threshold, if any, used to evaluate each question; and
   the mitigation measure identified, if any, to reduce the impact to less than significance.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
I.	**Aesthetics. Would the project:**				
	a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact. The proposed project could cause a gradual shift toward the use of more supplemental treatment OWTS or community collection systems instead of conventional systems. Such systems could be installed in a variety of settings in many areas of California, including scenic areas; however, as shown in Exhibit 2, most elements of conventional OWTS are located underground. This also is true for most elements of supplemental treatment systems. While some systems have above-grade components, these elements have a relatively low profile (generally consisting of aboveground piping, tanks, or mounds of soil no more than a few feet high). These elements also are small relative to the residences or commercial establishments that they accompany and are typically covered with soil and vegetation following a relatively short construction period.

Furthermore, installation of new OWTS is primarily associated with new building permits for residences and small businesses or replacement of failing systems; where these are located in scenic areas, they would be associated with other permitted structures. Siting criteria of the local authority would continue to help establish appropriate locations for new structures or modifications to existing structures, including the installation of treatment systems, and would address, on a site-specific basis, the potential for systems to affect designated scenic vistas or resources.

The impact of the proposed project on scenic vistas would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less-than-Significant Impact. See response to item (a) above.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less-than-Significant Impact. See response to item (a) above.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Permanent sources of external lighting are not a feature of OWTS and operation of OWTS would not generate new sources of light or glare. Thus, the proposed project would not create a new source of light and glare.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
II.	**Agricultural Resources.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
	b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
	c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☒	☐

DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less-than-Significant Impact. Installation of more supplemental treatment and community collection system OWTS could occur on a wide variety of soil types throughout the state, including areas that could be categorized under the Farmland Mapping and Monitoring Program as Farmland of Statewide Importance. However, the proposed project would not alter the number of OWTS that would be placed on farmland, nor would it meaningfully, if at all, alter the amount of farmland converted for use to OWTS-related uses. The potential impacts of the proposed project on such farmland are considered less than significant.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. Implementation of the proposed regulations would not affect zoning designations established by local land use jurisdictions. The proposed regulations do not address the types of land uses for which OWTS are appropriate; rather, they establish consistent standards for the functioning (i.e., construction, operation, and maintenance) of treatment systems in whatever locations the ALA or regional water board chooses to approve them. Under existing conditions, most jurisdictions allow OWTS in conjunction with residences in agricultural areas, including properties with Williamson Act contracts; this situation would not change under the proposed statewide OWTS regulations. The project would have no impact on agricultural zoning or Williamson Act contracts.

c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

Less-than-Significant Impact. See the response to item (a) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
III.	**Air Quality.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. Would the project:				
	a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
	d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
	e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Furthermore, the operation of OWTS systems does not generate criteria pollutants specific to air quality. The proposed project would not affect applicable air quality plans.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

No Impact. See the response to item (a) above.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

No Impact. See the response to item (a) above.

d) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. See the response to item (a) above.

e) Create objectionable odors affecting a substantial number of people?

Less-than-Significant Impact. The proposed regulations include provisions that would require new and existing OWTS systems to operate in such a way that no objectionable odors would be emitted (Section 22910[c]). The proposed regulations also contain specific requirements for maintenance and repair of faulty systems. Odors could occur for brief periods in areas immediately surrounding OWTS when septic tank clean-out operations are in progress. This impact is considered less than significant.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
IV.	**Biological Resources. Would the project:**				
	a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☒	☐	☐	☐
	b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☒	☐	☐	☐
	c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
	d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
	e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
	f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Potentially Significant Impact. California contains a wide variety of bioregions, from desert environments below sea level, to coastal areas, to alpine areas of 14,000 feet or more in elevation. However, the proposed project would not alter the number of OWTS that would be constructed in these bioregions in the future, nor would it meaningfully, if at all, alter the amount of undeveloped terrestrial habitat converted to OWTS-related uses. Under certain circumstances, the proposed project would affect the water quality of OWTS discharges into groundwater, and this in turn could affect the water quality of surface waters that provide aquatic, riparian or wetland habitat for special-status species. This impact on species that rely on such habitat types is considered potentially significant and will be carried forward for further evaluation in the EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Potentially Significant Impact. See the response to item (a) above.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Potentially Significant Impact. Siting requirements contained in the proposed statewide OWTS regulations limit installation of treatment systems to areas with at least 5 feet of separation (reduced to no less than 3 feet, in certain circumstances) between the system and seasonal high groundwater for conventional systems, and at least 2 feet of separation for supplemental systems (Section 22912). Percolation of treated effluent into the deeper soil profiles is a critical component of the treatment process for pathogen reduction. For these reasons, OWTS would not be constructed in areas where they could affect wetlands through direct removal or filling. However, OWTS discharges to groundwater could affect surface waters, including wetlands. This impact is considered potentially significant and will be carried forward for further evaluation in the EIR.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Potentially Significant Impact. As described under question a) above, the proposed project could affect aquatic, riparian or wetland habitats and the species that depend on such habitats. Therefore, changes in the quality of OWTS discharges to groundwater could affect surface waters that serve as migratory corridors or nursery sites for aquatic species. This impact is considered potentially significant and will be carried forward for further evaluation in the EIR.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed statewide OWTS regulations address construction, operation, and maintenance of individual treatment systems for residences and small commercial sites, and do not address local plans, policies or ordinances protecting biological resources. Therefore, potential conflicts with such plans, policies or ordinances are not expected.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. See the response to item (e) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
V.	**Cultural Resources. Would the project:**				
	a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
	b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
	c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
	d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Therefore, the potential impacts of the proposed project on any type of cultural resource, including historical resources, are considered less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less-than-Significant Impact. See the response to item (a) above.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-than-Significant Impact. See the response to item (a) above.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less-than-Significant Impact. See the response to item (a) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
VI.	**Geology and Soils. Would the project:**				
	a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☒	☐
	ii) Strong seismic ground shaking?	☐	☐	☒	☐
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	iv) Landslides?	☐	☐	☒	☐
	b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
	c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
	d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☒	☐
	e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐

DISCUSSION

Although all items in Section VI, "Geology and Soils," are identified as less-than-significant impacts, the EIR will describe the major hydrogeologic and soil conditions found in California and how these influence OWTS siting decisions. Potential effects on soil chemistry and morphology from changes in the water quality of OWTS effluent also will be addressed in the EIR.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Therefore, the proposed project would not likely cause significant seismic- or landslide-related hazards.

ii) Strong seismic ground shaking?

Less-than-Significant Impact. See the response to item (a)(i) above.

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. See the response to item (a)(i) above.

iv) Landslides?

Less-than-Significant Impact. See the response to item (a)(i) above.

b) Result in substantial soil erosion or the loss of topsoil?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Therefore, potentially significant soil erosion or loss of topsoil impacts are not expected.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less-than-Significant Impact. See the response to item (a)(i) above.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

Less-than-Significant Impact. See the response to item (a)(i) above.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less-than-Significant Impact. The proposed statewide OWTS regulations provide the framework for determining appropriate soil conditions on which to operate OWTS. For this reason, the proposed project includes standards for the installation and operation of OWTS, including adjustments based on soil types. Therefore, this impact would be less than significant.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
VII.	**Hazards and Hazardous Materials. Would the project:**				
	a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
	b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
	c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
	d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
	e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
	f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
	g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
	h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazardous materials include hazardous substances and hazardous wastes, which are defined and regulated under several federal and state statutes and associated regulations. California's Health and Safety Code (Section 25501[o]) designates hazardous materials as any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The proposed statewide OWTS regulations address treatment of household wastewater, up to the level of high-strength wastewater, and OWTS covered under

the proposed statewide OWTS regulations are not permitted to be used to treat or dispose of hazardous wastes (Section 22910[a]).

However, materials considered hazardous substances could enter OWTS septic tanks and dispersal fields through the use of commercial or household cleaning and personal care products that may be discharged into the sanitary system, and through the use of commercial septic tank maintenance products such as cleaners or additives. For the purposes of the proposed OWTS regulations, hazardous materials that could be discharged to OWTS include, but are not limited to, such materials as defined under the Health and Safety Code Section 25501: (1) substances for which the manufacturer is required to prepare a Material Safety and Data Sheet pursuant to California's Hazardous Substances Information and Training Act; (2) radioactive materials; or (3) materials considered to be a human or animal carcinogen. Commercial chemical products, such as bleach, detergents, scale and stain removals, solvents, and high-strength cleaning products may contain hazardous substances or otherwise qualify as a hazardous material.

In general, the intent of the proposed OWTS regulations is to reduce contaminant discharges and improve monitoring and performance of OWTS. Nevertheless, in response to new requirements included in the proposed regulations, regional or local regulatory agencies or private property owners may change the amount of hazardous materials discharged to septic tanks and OWTS dispersal systems over time. For example, a potential response to more frequent septic tank inspections and the results of groundwater monitoring could be an increase in the use of septic tank cleaners or additives. This could result in the detection of hazardous substances associated with OWTS that subsequently leads to corrective actions, as required by Section 22945 of the proposed regulations.

By definition and according to applicable regulations, hazardous substances are considered hazardous in their original form and concentrations. In general, the concentration of these substances in domestic septage would be expected to be small given that the large majority of sewage is water and fecal material. However, hazardous substances discharged into OWTS could reside in the accumulated sewage solids and soluble or dissolved hazardous substances can be subsequently discharged to the effluent dispersal system. Therefore, two types of potential impacts are considered in this section in relation to the question above:

- (a)(1) potential hazards related to septage pumping, transport, treatment, and disposal, and
- (a)(2) potential hazards related to discharge of OWTS effluent into groundwater and surface water

(a)(1) Less-than-Significant Impact—Potential hazards related to septage pumping, transport, treatment and disposal. Section 22910(s) of the proposed regulations would require mandatory septic tank inspections for solids accumulation upon property transfer that may result in an increase in the frequency of septic tank pumping and septage disposal. However, the potential increased frequency of voluntary or mandatory septage disposal would not be expected to appreciably change the risk of exposure to hazardous material or releases into the environment because the existing and comprehensive septage handling, treatment, and disposal procedures would continue and such procedures protect public health and the environment. For example, septage must be disposed of at licensed septage handling facilities where contact with the general public is not possible.

(a)(2) Potentially Significant Impact—Potential hazards related to discharge of OWTS effluent into groundwater and surface water. Hazardous substances that pass through the septic tank and are discharged to groundwater through the dispersal system could pose an environmental or public health risk. Hazardous substances that percolate to groundwater are regulated through applicable groundwater and surface water quality standards. It is not possible to determine the significance of this potential impact without further study. Because the exposure of potential hazardous substances would be through discharges to groundwater or surface water, this potential impact will be carried forward for further evaluation in the Hydrology and Water Quality section

of the EIR (which is covered by Section VIII of this checklist), and related impacts will be assessed using applicable water quality standards.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less-than-Significant Impact. The analysis of potential releases of hazardous materials into the environment through routine OWTS operations is described above in the response to item (a). Any hazardous materials discharged into septic tanks may then reside in the accumulated sewage solids. Subsequently, there is a small potential for accidental release of hazardous materials in the sewage sludge when septic tanks are pumped and the accumulated solids are transported to septage handling facilities. As described above, implementation of the proposed OWTS regulations may result in an increase in the frequency of septic tank pumping and solids transport and disposal. Any change in the frequency of voluntary or mandatory septic tank pumping would incrementally change the risk of accidental release. However, the potential impact is considered less than significant because the risk of accidental release is anticipated to be low, the quantity of waste material that may be discharged would typically be limited to the small quantity carried by individual pumping trucks, and it is anticipated that accidental spills would be cleaned up in accordance with normal emergency response service (i.e., fire, police) directives and septage hauler licensing requirements.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less-than-Significant Impact. See the responses to items (a) and (b) above. While accidental spills of hazardous materials contained in pumped OWTS septage solids from septic tanks could occur during transport to septage handling facilities. The incremental risk of those accidents occurring within a school zone are not likely to be measurable, and is thus considered less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less-than-Significant Impact. In general, the potential for disclosure of buried hazardous wastes in private real estate transactions is limited in California because the federal and state laws pertaining to hazardous materials and waste management are typically applicable only to public agency and nongovernmental entities. Often the historical land uses of a site, particularly in urbanized areas, is not fully known. Given these circumstances, the potential for development of OWTS on lands that contain hazardous wastes does currently exist and would continue to exist in the foreseeable future. However, the large majority of OWTS are used in rural areas for residential housing. With rare exception, rural areas in California typically reflect past agrarian (i.e., farming, ranching, timber, open space) land uses that have not changed. There are exceptions, such as formerly operated industrial facilities that are not readily apparent from visual inspection of the existing surface conditions and military bases that have undergone closure procedures and lands dispersed for general sale to the public. However, these cases are generally known, documented, and subject to the full force of regulatory policies, regulations, and procedures under state and federal hazardous waste laws.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. Because the proposed regulations would be applicable statewide, there is no way to know at this time if OWTS would be installed within 2 miles of a public airport; however, installation, operation, and maintenance

of OWTS would not involve any activities that could result in a safety hazard for people residing or working near an airport. No impact would result.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. As described in item (e) above, installation, operation, and maintenance of OWTS would not involve any activities that could result in a safety hazard for people residing or working near an airport. No impact would result.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. Installation, operation, and maintenance of OWTS would take place primarily on residential and small commercial sites and would not interfere with emergency response plans or emergency evacuation plans. No impact would result.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Therefore, potentially significant impacts involving an increase in the risk of wildland fires are not expected.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
VIII.	**Hydrology and Water Quality. Would the project:**				
	a) Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
	b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
	c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☒	☐
	d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☒	☐
	e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
	f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
	g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
	h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
	i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
	j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

(a)(1) Potentially Significant Impact—Violate water quality standards. By using a combination of uniform prescriptive and performance standards, the proposed project is expected to change the

way some OWTS operate, or function, after they are installed as part of new construction, or if an existing system is repaired or replaced. The proposed project also is expected to cause a gradual shift towards the use of more supplemental treatment OWTS or community collection systems in place of some conventional systems. All of these likely consequences of the proposed project could lead to significant water quality impacts. The reasons for this conclusion are briefly described below and this issue will be addressed in more detail in the OWTS EIR.

Despite the fact the proposed project may lead to a reduction in the amount of wastewater pollutants being discharged to groundwater in some situations, or no change in such discharges in other situations, the relevant provisions of applicable California statutes and regulations pertaining to groundwater and surface water quality protection may still be violated. For example, the surface water and groundwater WQOs for nitrate-nitrogen found in regional water board Basin Plans (typically set at the primary drinking water quality standard of 10 milligrams per liter [mg/l] as nitrogen) may still be violated. Many studies show that wastewater effluent from conventional OWTS, and systems with supplemental treatment, may exceed this value where OWTS discharges reach groundwater and at other points down gradient or downstream. For example, and as reported in USEPA 2002 based on work by Siegrist 2001, total nitrogen concentrations from conventional OWTS range from 40 to 100 mg/l. Nitrogen concentrations from supplemental treatment systems with aerobic units are typically 25 to 60 mg/l. Only with supplemental treatment that includes nitrogen removal recycling can nitrogen in OWTS effluent be reduced to as low as 10 to 30 mg/l. The same study asserts that under the best soil conditions, 3 to 5 feet of good soil can reduce nitrogen concentrations only by about 10 to 20 percent.

Potential violations of nitrate WQOs, bacterial and other types of WQOs, along with potential impairment of related beneficial uses, will be addressed by the EIR. The WQOs are designed to protect both the environment and public health and will be used by the EIR's water quality analysis to help determine the potential for significant impacts and the need for related mitigation.

(a)(2) Less-than-Significant Impact—Violate waste discharge requirements. WDRs and WDR waivers implement the regional water boards basin plans. As they do now, regional water boards would continue to issue WDRs or WDR waivers with specific conditions to be followed once the proposed regulations are implemented. To install an OWTS, an applicable permit from the regional water board or ALA would be required and the permits would require compliance with the regional water boards basin plan. Where a WDR is used to implement the basin plan, occasional WDR violations could occur if septic systems do not function properly, but monitoring provisions in the proposed regulations would be expected to identify such circumstances and remediate them. Therefore, violations of WDRs would not be common and this potential impact would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

No Impact. Installation and maintenance of OWTS systems does not use groundwater supplies. Further, these systems are designed to treat wastewater through the action of water flow through sediments into the deeper layers of the soil horizon, in most cases resulting in groundwater recharge. Thus, the proposed project would not lower the levels of groundwater tables.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Therefore, this potential impact is considered less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?

Less-than-Significant Impact. See the response to item (c) above.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less-than-Significant Impact. See the response to item (c) above.

f) Otherwise substantially degrade water quality?

Less-than-Significant Impact. See the response to item (c) above.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Less-than-Significant Impact. See the response to item (c) above.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

Less-than-Significant Impact. See the response to item (c) above.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. OWTS do not contain components that could cause flooding. In the case of failure of a septic tank, loss, injury, or death as a result of water escaping from the system almost never occurs because the volume of water is relatively small, and OWTS are typically sited downhill from dwellings. Thus, the proposed project would not increase the risk of flooding.

j) Result in inundation by seiche, tsunami, or mudflow?

No Impact. Siting criteria and regulations of the local authority would continue to establish appropriate locations for installation of treatment systems and would address, on a site-specific basis, the potential for a system to fail as a result of seiche, tsunami, or mudflow. Even in these circumstances, however, failure of a treatment system would not result in inundation because the volume of water that might escape from a system in rare circumstances is relatively small.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
IX.	**Land Use and Planning. Would the project:**				
	a) Physically divide an established community?	☐	☐	☐	☒
	b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
	c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

Although all items in Section IX, "Land Use and Planning," are identified as having no impact, the EIR will describe local land use regulations and compliance processes that accompany approval and siting of OWTS throughout the state. The EIR will also evaluate the potential for land use–related effects, including potential changes in development patterns in areas of the state, as part of the EIR's growth inducement analysis.

a) Physically divide an established community?

No Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. For these reasons, the proposed project would not physically divide an established community. Thus, there would be no impact.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Implementation of the proposed regulations would establish performance standards, siting requirements, and operational characteristics for existing and new OWTS throughout California. The proposed project would not change the current regulatory environment in California; land use and zoning decisions to allow, restrict, and regulate OWTS installation, operation, and maintenance would continue to be made by local agencies and regional water boards. The proposed project also is not expected to conflict with local land use decisions; for this reason, this potential impact is considered less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. As described in the response to item (b) above, the proposed statewide OWTS regulations are not expected to conflict with local land use and zoning decisions, and similarly, conflicts with local habitat conservation plans or natural community conservation plans are not expected.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
X.	**Mineral Resources. Would the project:**				
	a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
	b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒	☐

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less-than-Significant Impact. While OWTS are installed in a wide variety of rock formations and geologic conditions statewide, the proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. In addition, siting criteria of the local authority would continue to establish appropriate locations for installation of treatment systems and would address, on a site-specific basis any potential for a system to result in loss of availability of mineral resources. This impact is considered less than significant.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less-than-Significant Impact. See the response to item (a) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XI.	**Noise. Would the project result in:**				
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
	e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
	f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less-than-Significant Impact. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. Operation and maintenance of OWTS are not typically noise-producing activities. Supplemental treatment systems may have mechanical components that produce a low level of noise during operation. Because OWTS are generally installed near residences and small commercial enterprises, the sound levels produced by the system are designed to be minimal. Maintenance activities, such as pumping of septic tanks, take place occasionally and could involve higher levels of noise disturbance, but these activities are temporary and occur only periodically (in the case of pumping, once every few years). For these reasons, the proposed project is considered to have a less-than-significant noise impact.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact. See the response to item (a) above.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-than-Significant Impact. See the response to item (a) above.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-than-Significant Impact. See the response to item (a) above.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Installation, operation, and maintenance of OWTS under the proposed project would not involve any activities that could expose people residing or working near an airport to excessive noise levels. No impact would result.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. See the response to item (e) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XII.	**Population and Housing. Would the project:**				
	a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
	b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
	c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less-than-Significant Impact. OWTS are generally installed in rural areas as part of a building permit for a new home or small business. As such, these systems tend to be installed in areas where population growth is taking place. However, the proposed regulations are not expected to allow installation of OWTS in areas and on properties where they are not allowed under current regulations. As a result, implementation of the proposed project would not have the general effect of inducing population growth in areas throughout the state. This impact is considered less than significant but, nevertheless, will be carried forward for further evaluation in the EIR using public comments received during the EIR's scoping process.

b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

No Impact. Installation of OWTS typically accompanies housing construction and would not displace housing. Thus, there would be no impact.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Installation of OWTS typically accompanies housing construction and would not displace people. Thus, there would be no impacts.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XIII.	**Public Services. Would the project:**				
	a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	Fire protection?	☐	☐	☐	☒
	Police protection?	☐	☐	☐	☒
	Schools?	☐	☐	☐	☒
	Parks?	☐	☐	☐	☒
	Other public facilities?	☐	☐	☒	☐

DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Police protection?

Schools?

Parks?

No Impact. OWTS are privately owned facilities operated by individual homeowners or small businesses. These systems do not require fire or police protection, educational or recreational services to construct, operate, or maintain them. Thus, no impacts would occur related to these types of services.

Other public facilities?

Less-than-Significant Impact. OWTS are privately owned facilities operated by individual homeowners or small businesses. As will be assessed further in the EIR's economics and fiscal impact assessment, the proposed project could increase the staffing requirements of the State Water Board, regional water boards, or ALAs. However, if such staffing increases would be required, they would likely be minor and would not be expected to be large enough to require the construction of new facilities. Therefore, such potential impacts would be less than significant.

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XIV.	**Recreation. Would the project:**				
	a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
	b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. Installation of OWTS generally occurs in rural areas as part of new home or small business construction. OWTS are designed solely for the purpose of treating wastewater, and are not related to recreational facilities. As such, the proposed project would have no impact on the use of recreational facilities.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. See the response to item (a) above.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XV.	**Transportation/Traffic. Would the project:**				
	a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
	b) Exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
	c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
	d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
	e) Result in inadequate emergency access?	☐	☐	☐	☒
	f) Result in inadequate parking capacity?	☐	☐	☒	☐
	g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

DISCUSSION

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Less-than-Significant Impact. Installation of OWTS generally occurs in rural areas where traffic loads are relatively light. Construction activities associated with OWTS supplemental treatment installation would generally include use of a backhoe, a dump truck, and possibly one additional piece of construction equipment operating for less than 1 week. Operation and maintenance activities would include an increase in septic tank inspections and perhaps pumping, but related vehicle trips would occur infrequently and on roads where traffic loads are relatively light. The proposed project would not alter the number of OWTS that would be constructed in the future, nor would it meaningfully, if at all, alter the amount of land converted to OWTS-related uses. The proposed project would have a less-than-significant impact on traffic conditions.

b) Exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Less-than-Significant Impact. As discussed above in the response to item (a), OWTS supplemental treatment installation and maintenance could increase traffic on local and rural roadways, but by a minimal amount and on an infrequent basis. This impact is considered less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. Installation of OWTS would have no impact on air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. All OWTS are subject to local codes and most local codes do not allow OWTS to be installed directly adjacent to a roadway. Accordingly this would have no impact on traffic hazards beyond that of existing conditions, and as established by local agencies.. Therefore, the proposed project would likely not affect traffic hazards due to a design feature or incompatible uses.

e) Result in inadequate emergency access?

No Impact. Because the proposed project would not increase the number of OWTS installed over time, OWTS-related traffic patterns or emergency access to either the site of a treatment system or surrounding areas would likely not be affected.

f) Result in inadequate parking capacity?

Less-than-Significant Impact. As described in item (a) above, OWTS-related construction and maintenance activities could increase slightly due to the proposed project, but would involve a minimal number of workers working in rural areas for brief periods of time. This potential impact would be less than significant.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. For the same reasons described in items (a) through (f) above, and since alternative transportation systems are typically found in more urbanized areas than those where OWTS are typically found, implementation of the proposed regulations would likely have no impact on alternative transportation systems.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XVI.	**Utilities and Service Systems. Would the project:**				
	a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
	b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
	c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
	d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
	e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
	f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
	g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less-than-Significant Impact. See the related discussion in Section VIII, "Hydrology and Water Quality," item (a)(2).

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. While the proposed project is not expected to increase the number of OWTS installed over time, it could lead to an increase in the expansion of existing community collection systems, the construction of new collection systems as opposed to individual OWTS, or although unlikely, an expansion in existing sewer system conveyance capacity or in the capacity of centralized treatment plants. Such possibilities could result if the proposed regulations are considerably more restrictive than existing OWTS regulations being enforced. Section 22910(s) of the proposed regulations requires septic tank inspections upon every transfer of ownership. This may lead to more frequent septic tank pumping. More frequent pumping of septage from septic tanks could lead to an increase in the volume of septage that would need to be treated at centralized treatment plants. Also, the relatively high costs of most supplemental treatment OWTS, which can often be twice the cost of conventional systems, may also make the option of constructing community collection systems and consolidating

financial resources attractive to members of a neighborhood or community where local siting conditions are challenging or not appropriate for individual systems. Or, the proposed regulations' groundwater monitoring requirement may lead to more collection systems if local drinking water supplies are being contaminated by individual OWTS.

Thus, the proposed project could lead to more community collection system construction, the expansion of existing sewer lines or treatment plant capacities. Such construction or expansion activities have the potential to cause significant environmental impacts and these potential impacts will be assessed further in the EIR.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project addresses installation, operation, and maintenance of OWTS systems, which operate independently of any storm drainage system that may be present in a community. Impacts on storm water drainage facilities are not expected.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The proposed project addresses installation, operation, and maintenance of OWTS systems, and would not impact water supply entitlements.

e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

No Impact. This potential impact is not expected because OWTS operate independently of the centralized wastewater treatment facilities operated by treatment providers. Thus, there would be no impact. The potential environmental impacts associated with the expansion of existing community collection systems or sewer systems connected to centralized treatment facilities are addressed under item b) above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Potentially Significant Impact. As noted under question b) above, the proposed project could increase the amount of OWTS septage that would be treated at centralized treatment plants or disposed of in septage ponds lined in compliance with Title 27, or through prescribed land application where public contact does not occur. Treatment of septage at centralized treatment plants would generate a solid waste byproduct referred to as biosolids. Biosolids are typically disposed of in landfills; if existing landfill capacities are not sufficient, the proposed project could indirectly cause an expansion in landfill capacities. Thus, this issue needs to be addressed in the EIR and an increase in the need for solid waste disposal has the potential to cause significant environmental impacts.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed project would not change the manner in which solid waste is created, handled or disposed of. Thus, there is no reason to believe the proposed project would change how solid waste handling and disposal regulations are complied with.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less-than-significant with Mitigation Incorporated	Less-than-significant Impact	No Impact
XVII.	**Mandatory Findings of Significance.**				
	a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
	b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐
	c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Authority: Public Resources Code Sections 21083 and 21087.
Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. As described in Section IV, "Biological Resources," the potential exists for the proposed project to affect aquatic special-status plant and wildlife species and sensitive natural communities throughout the state. Without further analysis, it is not possible to rule out the possibility that the project could substantially reduce the number or restrict the range of a protected species. These issues will be carried forward for further evaluation in the EIR.

As described in Section V, "Cultural Resources," impacts on archaeological and historical resources would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. Implementation of the proposed statewide OWTS regulations has the potential to cause impacts that are individually limited but cumulatively considerable. Possible areas of cumulative effects include violation of water quality objectives, loss of habitat for aquatic special-status species, and a potential increase in the demand for septage treatment at centralized treatment plants or the disposal of biosolids at landfills. These issues will be carried forward for further evaluation in the EIR.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. The proposed project has the potential to affect water quality and public health in ways that could cause substantial adverse effects on human beings. These issues will be carried forward for further evaluation in the EIR.

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USEPA. *See* U.S. Environmental Protection Agency

APPENDIX A

SECTIONS 13290-13291.7, CHAPTER 4.5 DIVISION 6

CALIFORNIA WATER CODE

(CODIFIED REQUIREMENTS OF AB 885)

APPENDIX A

This appendix includes Sections 13290 through 13291.7 of the California Water Code. The language in these sections is from AB 885 (Chapter 781, Statutes of 2000), which was passed and signed into law in September 2000. As described in Chapters 1 and 2 of the attached Initial Study, these Water Code sections require the State Water Board to draft and implement new statewide OWTS regulations.

CHAPTER 4.5. ONSITE SEWAGE TREATMENT SYSTEMS

§ 13290. Definitions

For the purposes of this chapter:

(a) "Local agency" means any of the following entities:

(1) A city, county, or city and county.

(2) A special district formed pursuant to general law or special act for the local performance of functions regarding onsite sewage treatment systems within limited boundaries.

(b) "Onsite sewage treatment systems" includes individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface disposal.

§ 13291. Adoption of regulations or standards

(a) On or before January 1, 2004, the state board, in consultation with the State Department of Health Services, the California Coastal Commission, the California Conference of Directors of Environmental Health, counties, cities, and other interested parties, shall adopt regulations or standards for the permitting and operation of all of the following onsite sewage treatment systems in the state and shall apply those regulations or standards commencing six months after their adoptions:

(1) Any system that is constructed or replaced.

(2) Any system that is subject to a major repair.

(3) Any system that pools or discharges to the surface.

(4) Any system that, in the judgment of a regional board or authorized local agency, discharges waste that has the reasonable potential to cause a violation of water quality objectives, or to impair present or future beneficial uses of water, to cause pollution, nuisance, or contamination of the waters of the state.

(b) Regulations or standards adopted pursuant to subdivision (a), shall include, but shall not be limited to, all of the following:

(1) Minimum operating requirements that may include siting, construction, and performance requirements.

(2) Requirements for onsite sewage treatment systems adjacent to impaired waters identified pursuant to subdivision (d) of Section 303 of the Clean Water Act (33 U.S.C. Sec. 1313(d)).

(3) Requirements authorizing a qualified local agency to implement those requirements adopted under this chapter within its jurisdiction if that local agency requests that authorization.

(4) Requirements for corrective action when onsite sewage treatment systems fail to meet the requirements or standards.

(5) Minimum requirements for monitoring used to determine system or systems performance, if applicable.

(6) Exemption criteria to be established by regional boards.

(7) Requirements for determining a system that is subject to a major repair, as provided in paragraph (2) of subdivision (a).

(c) This chapter does not diminish or otherwise affect the authority of a local agency to carry out laws, other than this chapter, that relate to onsite sewage treatment systems.

(d) This chapter does not preempt any regional board or local agency from adopting or retaining standards for onsite sewage treatment systems that are more protective of the public health or the environment than this chapter.

(e) Each regional board shall incorporate the regulations or standards adopted pursuant to subdivisions (a) and (b) into the appropriate regional water quality control plans.

§ 13291.5. Legislative intent

It is the intent of the Legislature to assist private property owners with existing systems who incur costs as a result of the implementation of the regulations established under this section by encouraging the state board to make loans under Chapter 6.5 (commencing with Section 13475) to local agencies to assist private property owners whose cost of compliance with these regulations exceeds one-half of one percent of the current assessed value of the property on which the onsite sewage system is located.

§ 13291.7. Non-limiting clause

Nothing in this chapter shall be construed to limit the land use authority of any city, county, or city and county.

APPENDIX B
SECTION 13269 CALIFORNIA WATER CODE
(CODIFIED REQUIREMENTS OF SB 390 AND SB 923)

APPENDIX B

This appendix includes additional California Water Code sections that are particularly relevant to the proposed statewide OWTS regulations contained in Appendix C. In addition to complying with the Water Code sections contained in Appendix A, the State Water Board developed the proposed statewide OWTS regulations to comply with California Water Code Section 13269. These sections are contained herein and the language in these sections is originally from the following state legislation that addressed waste discharges and related monitoring requirements:

- SB 390 (Chapter 686, Statutes of 1999) and
- SB 923 (Chapter 801, Statutes of 2003).

§ 13269. Waiver

(a)(1) On and after January 1, 2000, the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, or subdivision (a) of Section 13264 may be waived by the state board or a regional board as to a specific discharge or type of discharge if the state board or a regional board determines, after any necessary state board or regional board meeting, that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest. The state board or a regional board shall give notice of any necessary meeting by publication pursuant to Section 11125 of the Government Code.

(2) A waiver may not exceed five years in duration, but may be renewed by the state board or a regional board. The waiver shall be conditional and may be terminated at any time by the state board or a regional board. The conditions of the waiver shall include, but need not be limited to, the performance of individual, group, or watershed-based monitoring, except as provided in paragraph (3). Monitoring requirements shall be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In establishing monitoring requirements, the regional board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts; the size of the project area; and other relevant factors. Monitoring results shall be made available to the public.

(3) The state board or a regional board may waive the monitoring requirements described in this subdivision for discharges that it determines do not pose a significant threat to water quality.

(4)(A) The state board or a regional board may include as a condition of a waiver the payment of an annual fee established by the state board in accordance with subdivision (f) of Section 13260.

(B) Funds generated by the payment of the fee shall be deposited in the Waste Discharge Permit Fund for expenditure, upon appropriation by the Legislature, by the state board or appropriate regional board for the purpose of carrying out activities limited to those necessary to establish and implement the waiver program pursuant to this section. The total amount of annual fees collected pursuant to this section shall not exceed the costs of those activities necessary to establish and implement waivers of waste discharge requirements pursuant to this section.

(C) In establishing the amount of a fee that may be imposed on irrigated agriculture operations pursuant to this section, the state board shall consider relevant factors, including, but not limited to, all of the following:

(D) In establishing the amount of a fee that may be imposed on silviculture operations pursuant to this section, the state board shall consider relevant factors, including, but not limited to, all of the following:

(i) The size of the operations.

(ii) Any compliance costs borne by the operations pursuant to state and federal water quality regulations.

(iii) Any costs associated with water quality monitoring performed or funded by the operations.

(iv) The average annual number of timber harvest plans proposed by the operations.

(5) The state board or a regional board shall give notice of the adoption of a waiver by publication within the affected county or counties as set forth in Section 6061 of the Government Code.

(b)(1) A waiver in effect on January 1, 2000, shall remain valid until January 1, 2003, unless the regional board terminates that waiver prior to that date. All waivers that were valid on January 1, 2000, and granted an extension until January 1, 2003, and not otherwise terminated, may be renewed by a regional board in five-year increments.

(2) Notwithstanding paragraph (1), a waiver for an onsite sewage treatment system that is in effect on January 1, 2002, shall remain valid until June 30, 2004, unless the regional board terminates the waiver prior to that date. Any waiver for onsite sewage treatment systems adopted or renewed after June 30, 2004, shall be consistent with the applicable regulations or standards for onsite sewage treatment systems adopted or retained in accordance with Section 13291.

(c) Upon notification of the appropriate regional board of the discharge or proposed discharge, except as provided in subdivision (d), the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, and subdivision (a) of Section 13264 do not apply to a discharge resulting from any of the following emergency activities:

(1) Immediate emergency work necessary to protect life or property or immediate emergency repairs to public service facilities necessary to maintain service as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor pursuant to Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code.

(2) Emergency projects undertaken, carried out, or approved by a public agency to maintain, repair, or restore an existing highway, as defined in Section 360 of the Vehicle Code, except for a highway designated as an official state scenic highway pursuant to Section 262 of the Streets and Highways Code, within the existing right-of-way of the highway, damaged as a result of fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide within one year of the damage. This paragraph does not exempt from this section any project undertaken, carried out, or approved by a public agency to expand or widen a highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide.

(d) Subdivision (c) is not a limitation of the authority of a regional board under subdivision (a) to determine that any provision of this division shall not be waived or to establish conditions of a waiver. Subdivision (c) shall not apply to the extent that it is inconsistent with any waiver or other order or prohibition issued under this division.

(e) The regional boards and the state board shall require compliance with the conditions pursuant to which waivers are granted under this section.

(f) Prior to renewing any waiver for a specific type of discharge established under this section, the state board or a regional board shall review the terms of the waiver policy at a public hearing. At the hearing, the state board or a regional board shall determine whether the discharge for which the waiver policy was established should be subject to general or individual waste discharge requirements.

APPENDIX C

PROPOSED OWTS REGULATIONS

APPENDIX D

WATER CODE SECTIONS 13260 AND 13263

WASTE DISCHARGE REQUIREMENTS

ARTICLE 4. WASTE DISCHARGE REQUIREMENTS

§ 13260. Reports; fees; exemptions

(a) All of the following persons shall file with the appropriate regional board a report of the discharge, containing the information which may be required by the regional board:

(1) Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) Any person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) Any person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Every person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

(d)(1)(A) Each person who is subject to subdivision (a) or (c) shall submit an annual fee according to a fee schedule established by the state board.

(B) The total amount of annual fees collected pursuant to this section shall equal that amount necessary to recover costs incurred in connection with the issuance, administration, reviewing, monitoring, and enforcement of waste discharge requirements and waivers of waste discharge requirements.

(C) Recoverable costs may include, but are not limited to, costs incurred in reviewing waste discharge reports, prescribing terms of waste discharge requirements and monitoring requirements, enforcing and evaluating compliance with waste discharge requirements and waiver requirements, conducting surface water and groundwater monitoring and modeling, analyzing laboratory samples, and reviewing documents prepared for the purpose of regulating the discharge of waste, and administrative costs incurred in connection with carrying out these actions.

(D) In establishing the amount of a fee that may be imposed on any confined animal feeding and holding operation pursuant to this section, including, but not limited to, any dairy farm, the state board shall consider all of the following factors:

(i) The size of the operation.

(ii) Whether the operation has been issued a permit to operate pursuant to Section 1342 of Title 33 of the United States Code.

(iii) Any applicable waste discharge requirement or conditional waiver of a waste discharge requirement.

(iv) The type and amount of discharge from the operation.

(v) The pricing mechanism of the commodity produced.

(vi) Any compliance costs borne by the operation pursuant to state and federal water quality regulations.

(vii) Whether the operation participates in a quality assurance program certified by a regional water quality control board, the state board, or a federal water quality control agency.

(2)(A) Subject to subparagraph (B), any fees collected pursuant to this section shall be deposited in the Waste Discharge Permit Fund, which is hereby created. The money in the fund is available for expenditure by the state board, upon appropriation by the Legislature, solely for the purposes of carrying out this division.

(B)(i) Notwithstanding subparagraph (A), the fees collected pursuant to this section from stormwater dischargers that are subject to a general industrial or construction stormwater permit under the national pollutant discharge elimination system (NPDES) shall be separately accounted for in the Waste Discharge Permit Fund.

(ii) Not less than 50 percent of the money in the Waste Discharge Permit Fund that is separately accounted for pursuant to clause (i) is available, upon appropriation by the Legislature, for expenditure by the regional board with jurisdiction over the permitted industry or construction site that generated the fee to carry out stormwater programs in the region.

(iii) Each regional board that receives money pursuant to clause (ii) shall spend not less than 50 percent of that money solely on stormwater inspection and regulatory compliance issues associated with industrial and construction stormwater programs.

(3) Any person who would be required to pay the annual fee prescribed by paragraph (1) for waste discharge requirements applicable to discharges of solid waste, as defined in Section 40191 of the Public Resources Code, at a waste management unit that is also regulated under Division 30 (commencing with Section 40000) of the Public Resources Code, shall be entitled to a waiver of the annual fee for the discharge of solid waste at the waste management unit imposed by paragraph (1) upon verification by the state board of payment of the fee imposed by Section 48000 of the Public Resources Code, and provided that the fee established pursuant to Section 48000 of the Public Resources Code generates revenues sufficient to fund the programs specified in Section 48004 of the Public Resources Code and the amount appropriated by the Legislature for those purposes is not reduced.

(e) Each person discharges [sic] waste in a manner regulated by this section shall pay an annual fee to the state board. The state board shall establish, by regulation, a timetable for the payment of the annual fee. If the state board or a regional board determines that the discharge will not affect, or have the potential to affect, the quality of the waters of the state, all or part of the annual fee shall be refunded.

(f)(1) The state board shall adopt, by emergency regulations, a schedule of fees authorized under subdivision (d). The total revenue collected each year through annual fees shall be set at an amount equal to the revenue levels set forth in the Budget Act for this activity. The state board shall automatically adjust the annual fees each fiscal year to conform with the revenue levels set forth in the Budget Act for this activity. If the state board determines that the revenue collected during the preceding year was greater than, or less than, the revenue levels set forth in the Budget Act, the state board may further adjust the annual fees to compensate for the over and under collection of revenue.

(2) The emergency regulations adopted pursuant to this subdivision, any amendment thereto, or subsequent adjustments to the annual fees, shall be adopted by the state board in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health, safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, any emergency regulations adopted by the state board, or adjustments to the annual fees made by the state board pursuant to this section, shall not be subject to review by the Office of Administrative Law and shall remain in effect until revised by the state board.

(g) The state board shall adopt regulations setting forth reasonable time limits within which the regional board shall determine the adequacy of a report of waste discharge submitted under this section.

(h) Each report submitted under this section shall be sworn to, or submitted under penalty of perjury.

(i) The regulations adopted by the state board pursuant to subdivision (f) shall include a provision that annual fees shall not be imposed on those who pay fees under the national pollutant discharge elimination system until the time when those fees are again due, at which time the fees shall become due on an annual basis.

(j) Any person operating or proposing to construct an oil, gas, or geothermal injection well subject to paragraph (3) of subdivision (a), shall not be required to pay a fee pursuant to subdivision (d), if the injection well is regulated by the Division of Oil and Gas of the Department of Conservation, in lieu of the appropriate California regional water quality control board, pursuant to the memorandum of understanding, entered into between the state board and the Department of Conservation on May 19, 1988. This subdivision shall remain operative until the memorandum of understanding is revoked by the state board or the Department of Conservation.

(k) In addition to the report required by subdivision (a), before any person discharges mining waste, the person shall first submit both of the following to the regional board:

(1) A report on the physical and chemical characteristics of the waste that could affect its potential to cause pollution or contamination. The report shall include the results of all tests required by regulations adopted by the board, any test adopted by the Department of Toxic Substances Control pursuant to Section 25141 of the Health and Safety Code for extractable, persistent, and bioaccumulative toxic substances in a waste or other material, and any other tests that the state board or regional board may require, including, but not limited to, tests needed to determine the acid-generating potential of the mining waste or the extent to which hazardous substances may persist in the waste after disposal.

(2) A report that evaluates the potential of the discharge of the mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances.

(l) Except upon the written request of the regional board, a report of waste discharge need not be filed pursuant to subdivision (a) or (c) by a user of recycled water that is being supplied by a supplier or distributor of recycled water for whom a master recycling permit has been issued pursuant to Section 13523.1.

§ 13260.2. Fee for no exposure certifications

(a) The state board shall establish a fee in an amount sufficient to recover its costs in reviewing, processing, and enforcing "no exposure" certifications issued to facilities that apply for those certifications in accordance with a general industrial stormwater permit.

(b) Revenue generated pursuant to this section shall be deposited in the Waste Discharge Permit Fund.

§ 13260.3. Fee Report

On or before January 1 of each year, the state board shall report to the Governor and the Legislature on the expenditure of annual fees collected pursuant to Section 13260.

§ 13263. Requirements for discharge

(a) The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.

(b) A regional board, in prescribing requirements, need not authorize the utilization of the full waste assimilation capacities of the receiving waters.

(c) The requirements may contain a time schedule, subject to revision in the discretion of the board.

(d) The regional board may prescribe requirements although no discharge report has been filed.

(e) Upon application by any affected person, or on its own motion, the regional board may review and revise requirements. All requirements shall be reviewed periodically.

(f) The regional board shall notify in writing the person making or proposing the discharge or the change therein of the discharge requirements to be met. After receipt of the notice, the person so notified shall provide adequate means to meet the requirements.

(g) No discharge of waste into the waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.

(h) The regional board may incorporate the requirements prescribed pursuant to this section into a master recycling permit for either a supplier or distributor, or both, of recycled water.

(i) The state board or a regional board may prescribe general waste discharge requirements for a category of discharges if the state board or that regional board finds or determines that all of the following criteria apply to the discharges in that category:

(1) The discharges are produced by the same or similar operations.

(2) The discharges involve the same or similar types of waste.

(3) The discharges require the same or similar treatment standards.

(4) The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

(j) The state board, after any necessary hearing, may prescribe waste discharge requirements in accordance with this section.

§ 13263.1. Mining waste

Before a regional board issues or revises waste discharge requirements pursuant to Section 13263 for any discharge of mining waste, the regional board shall first determine that the proposed mining waste discharge is consistent with a waste management strategy that prevents the pollution or contamination of the waters of the state, particularly after closure of any waste management unit for mining waste.

§ 13263.2. Groundwater treatment facilities

The owner or operator of a facility that treats groundwater which qualifies as a hazardous waste pursuant to Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code is exempt from the requirement to obtain a hazardous waste facility permit pursuant to Section 25201 of the Health and Safety Code for the treatment of groundwater if all of the following conditions are met:

(a) The facility treats groundwater which is extracted for the purposes of complying with one or more of the following:

(1) Waste discharge requirements prescribed pursuant to Section 13263.

(2) A cleanup or abatement order issued pursuant to Section 13304.

(3) A written authorization issued by a regional board or local agency designated pursuant to Section 25283 of the Health and Safety Code.

(4) An order or approved remedial action plan issued pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.

(b) The facility meets, at a minimum, all of the following operating standards:

(1) The treatment does not require a hazardous waste facilities permit pursuant to the Resource Conservation and Recovery Act, as amended (42 U.S.C. Sec. 6901 et seq.).

(2) The facility operator prepares and maintains written operating instructions and a record of the dates, amounts, and types of waste treated.

(3) A written authorization issued by a regional board or local agency designated pursuant to Section 25283 of the Health and Safety Code.

(4) An order or approved remedial action plan issued pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.

(b) The facility meets, at a minimum, all of the following operating standards:

(1) The treatment does not require a hazardous waste facilities permit pursuant to the Resource Conservation and Recovery Act, as amended (42 U.S.C. Sec. 6901 et seq.).

(2) The facility operator prepares and maintains written operating instructions and a record of the dates, amounts, and types of waste treated.

(3) The facility operator prepares and maintains a written inspection schedule and log of inspections conducted.

(4) The records specified in paragraphs (2) and (3) are maintained by the owner or operator of the facility for a period of three years.

(5) The owner or operator maintains adequate records to demonstrate that it is in compliance with all of the pretreatment standards and with all of the applicable industrial waste discharge requirements issued by the agency operating the publicly owned treatment works into which the wastes are discharged.

(6)(A) Upon terminating the operation of any treatment process or unit exempted pursuant to this section, the owner or operator that conducted the treatment removes or decontaminates all waste residues, containment system components, soils, and other structures or equipment contaminated with hazardous waste from the unit. The removal of the unit from service shall be conducted in a manner that does both of the following:

(i) Minimizes the need for further maintenance.

(ii) Eliminates the escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or waste decomposition products to the environment after the treatment process ceases operation.

(B) Any owner or operator who permanently ceases operation of a treatment process or unit that is exempted pursuant to this section shall provide written notification to the regional board or local agency upon completion of all activities required by this subdivision.

(7) The waste is managed in accordance with all applicable requirements for generators of hazardous waste under Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code and the regulations adopted by the Department of Toxic Substances Control pursuant to that chapter.

(c) The groundwater is treated at the site where it is extracted in compliance with one or more of paragraphs (1), (2), (3), and (4) of subdivision (a).

(d) All other regulatory requirements applicable to the facility pursuant to Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code are met by the owner or operator.

(e) The treatment of the contaminated groundwater is not performed under corrective action required by Section 25200.10 of the Health and Safety Code.

§ 13263.3. Legislative findings; definitions

(a) The Legislature finds and declares that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society. The Legislature also finds and declares that pollution prevention is necessary to support the federal goal of zero discharge of pollutants into navigable waters.

(b)(1) For the purposes of this section, "pollution prevention" means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes any of the following:

(A) "Input change," which means a change in raw materials or feedstocks used in a production process or operation so as to reduce, avoid, or eliminate the generation of pollutants discharged in wastewater.

(B) "Operational improvement," which means improved site management so as to reduce, avoid, or eliminate the generation of pollutants discharged in wastewater.

(C) "Production process change," which means a change in a process, method, or technique that is used to produce a product or a desired result, including the return of materials or their components for reuse within the existing processes or operations, so as to reduce, avoid, or eliminate the generation of pollutants discharged in wastewater.

(D) "Product reformulation," which means changes in design, composition, or specifications of end products, including product substitution, so as to reduce, avoid, or eliminate the generation of problem pollutants discharged in wastewater.

(2) For the purposes of this section, "pollution prevention" does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the state board, the regional board, or POTW.

(c) For the purposes of this section, "discharger" means any entity required to obtain a national pollutant discharge elimination system (NPDES) permit pursuant to the Clean Water Act (33 U.S.C. Sec. 1251 et seq.), or any entity subject to the pretreatment program as defined in Part 403 (commencing with Section 403.1) of Subchapter N of Chapter 1 of Part 403 of Title 40 of the Code of Federal Regulations.

(d)(1) The state board, a regional board, or a POTW may require a discharger subject to its jurisdiction to complete and implement a pollution prevention plan if any of the following apply:

(A) A discharger is determined by the state board to be a chronic violator, and the state board, a regional board, or

the POTW determines that pollution prevention could assist in achieving compliance.

(B) The discharger significantly contributes, or has the potential to significantly contribute, to the creation of a toxic hot spot as defined in Section 13391.5.

(C) The state board, a regional board, or a POTW determines pollution prevention is necessary to achieve a water quality objective.

(D) The discharger is subject to a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300 or 13308.

(2) A pollution prevention plan required of a discharger other than a POTW pursuant to paragraph (1) shall include all of the following:

(A) An analysis of one or more of the pollutants, as directed by the state board, a regional board, or a POTW, that the facility discharges into water or introduces into POTWs, a description of the sources of the pollutants, and a comprehensive review of the processes used by the discharger that result in the generation and discharge of the pollutants.

(B) An analysis of the potential for pollution prevention to reduce the generation of the pollutants, including the application of innovative and alternative technologies and any adverse environmental impacts resulting from the use of those methods.

(C) A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution prevention techniques.

(D) A statement of the discharger's pollution prevention goals and strategies, including priorities for short-term and long-term action.

(E) A description of the discharger's existing pollution prevention methods.

(F) A statement that the discharger's existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified to the satisfaction of the state board, the regional board, or the POTW, and information that supports that statement.

(G) Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the discharger is also subject to that act.

(H) An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.

(I) A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the discharger for implementation.

(3) The state board or a regional board may require a POTW to complete and implement a pollution prevention plan that includes all of the following:

(A) An estimate of all of the sources of a pollutant contributing, or potentially contributing, to the loading of that pollutant in the treatment plant influent.

(B) An analysis of the methods that could be used to prevent the discharge of the pollutants into the POTW, including application of local limits to industrial or commercial dischargers regarding pollution prevention techniques, public education and outreach, or other innovative and alternative approaches to reduce discharges of the pollutant to the POTW . The analysis also shall identify sources, or potential sources, not within the ability or authority of the POTW to control, such as pollutants in the potable water supply, airborne pollutants, pharmaceuticals, or pesticides, and estimate the magnitude of those sources, to the extent feasible.

(C) An estimate of load reductions that may be attained through the methods identified in subparagraph (B).

(D) A plan for monitoring the results of the pollution prevention program.

(E) A description of the tasks, cost, and time required to investigate and implement various elements in the pollution prevention plan.

(F) A statement of the POTW's pollution prevention goals and strategies, including priorities for short-term and long-term action, and a description of the POTW's intended pollution prevention activities for the immediate future.

(G) A description of the POTW's existing pollution prevention programs.

(H) An analysis, to the extent feasible, of any adverse environmental impacts, including cross media impacts or substitute chemicals, that may result from the implementation of the pollution prevention program.

(I) An analysis, to the extent feasible, of the costs and benefits that may be incurred to implement the pollution prevention program.

(e) The state board, a regional board, or a POTW may require a discharger subject to this section to comply with the pollution prevention plan developed by the discharger after providing an opportunity for comment at a public proceeding with regard to that plan.

(f) The state board, regional boards, and POTWs shall make the pollution prevention plans available for public review, except to the extent that information is classified as confidential because it is a trade secret. Trade secret information shall be set forth in an appendix that is not available to the public.

(g) The state board or regional board may assess civil liability pursuant to paragraph (1) of subdivision (c) of Section 13385 against a discharger for failure to complete a pollution prevention plan required by the state board or a regional board, for submitting a plan that does not comply with the act, or for not implementing a plan, unless the POTW has assessed penalties for the same action.

(h) A POTW may assess civil penalties and civil administrative penalties pursuant to Sections 54740, 54740.5, and 54740.6 of the Government Code against a discharger for failure to complete a pollution prevention plan when required by the POTW, for submitting a plan that does not comply with the act, or for not implementing a plan, unless the state board or a regional board has assessed penalties for the same action.

(i) A discharger may change its pollution prevention plan, including withdrawing from a pollution prevention measure required by the state board, a regional board, or a POTW, if the discharger determines that the measure will have a negative impact on product quality, the safe operation of the facility, or the environmental aspects of the facility's operation, or the discharger determines that the measure is economically impracticable or technologically infeasible. Where practicable and feasible, the discharger shall replace the withdrawn measure with a measure that will likely achieve similar pollution prevention objectives. A measure may be withdrawn pursuant to this subdivision only with the approval of the executive officer of the state board or the regional board, or the POTW.

(j) The state board shall adopt a sample format to be used by dischargers for completing the plan required by this section. The sample format shall address all of the factors the discharger is required to include in the plan. The board may include any other factors determined by the board to be necessary to carry out this section. The adoption of the sample format pursuant to this section is not subject to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(k) The state board, a regional board, or POTW may not include a pollution prevention plan in any waste discharge requirements or other permit issued by that agency.

(*l*) This section prevails over Section 13263.3, as added to the Water Code by Assembly Bill 1104 of the 1999-2000 Regular Session.

§ 13263.5. Requirements for injection wells

(a) When the regional board issues waste discharge requirements pursuant to Section 13263, or revises waste discharge requirements pursuant to subdivision (g) of Section 25159.17 of the Health and Safety Code, for any injection well into which hazardous waste is discharged, the waste discharge requirements shall be based upon the information contained in the hydrogeological assessment report prepared pursuant to Section 25159.18 of the Health and Safety Code and shall include conditions in the waste discharge requirements to ensure that the waters of the state are not polluted or threatened with pollution.

(b) If the state board applies to the federal Environmental Protection Agency to administer the Underground Injection Control Program pursuant to Part 145 (commencing with Section 145.1) of Subchapter D of Chapter 1 of Title 40 of the Code of Federal Regulations, that application shall not include a request to administer the Underground Injection Control Program for any oil, gas, or geothermal injection wells supervised or regulated by the Division of Oil and Gas pursuant to Section 3106 or 3714 of the Public Resources Code.

§ 13263.6. Effluent limitations

(a) The regional board shall prescribe effluent limitations as part of the waste discharge requirements of a POTW for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec. 11023) indicate as discharged into the POTW, for which the state board or the regional board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective.

(b) This section prevails over Section 13263.6, as added to the Water Code by Assembly Bill 1104 of the 1999-2000 Regular Session.

TEXT OF PROPOSED REGULATIONS

(Add to California Code of Regulations, Title 27, Division 2, Subdivision 1, Chapter 7)

CHAPTER 7. ONSITE WASTEWATER TREATMENT SYSTEMS

ARTICLE 1. DEFINITIONS

§22900. SWRCB – General Definitions.

Except as otherwise indicated in this Article, definitions of terms used in the SWRCB-promulgated portions of this Subdivision shall be those set forth in Division 7 (commencing with Section 13000) of the Water Code and Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100).

"**Authorized local agency** (**ALA**)" means a city or county government body or a responsible management agency that has formal, written authorization from a RWQCB to administer this Chapter, or a portion thereof.

"**At-grade system**" is an OWTS dispersal system that has specific design parameters located at or close to the original grade. The discharge from an at-grade system is always subsurface.

"**Basin plan**" is the same as "water quality control plan" as defined in Division 7 (commencing with Section 13000) of the Water Code. The listed beneficial uses of the State's surface water and groundwater are designated by each RWQCB in basin plans.

"**Bedrock**" is the rock, usually solid, that underlies soil or other unconsolidated surficial material.

"**Certification**" is an expression of professional opinion through certificate, stamp, or signature that the OWTS, or its components, meets industry standards that are the subject of the certification, but does not constitute a warranty or guarantee, either express or implied. For proprietary supplemental treatment systems, certification is a statement that indicates the subject system has demonstrated performance through an independent, third-party evaluation of performance data, but still does not constitute a warranty or guarantee, either express or implied.

"**Coarse fragments**" are rock or mineral particles greater than 2.0 mm in diameter.

"Community water supply" is a public water system regulated by the California Department of Health Services or a local health department.

"**Conventional system**" is an OWTS consisting of a septic tank and typically a gravity subsurface dispersal system, for example a leachfield, seepage pit, or an evapotranspiration and absorption system. A conventional system may include septic tank effluent pumping where the dispersal area is located at a higher elevation than the associated septic tank, or a pressure distribution system, a mound system or an at-grade system. Properly sited, designed, installed and operated conventional systems are capable of nearly complete removal of suspended solids, biodegradable organic compounds and fecal coliforms. However, other pollutants may not be removed to acceptable levels. For example, conventional systems are expected to remove no greater than 10 to 40% of the total nitrogen in domestic wastewater.

"**Cutbank**" is a man-made excavation of the natural terrain or natural drop in elevation that is in excess of three feet vertical distance over a three-foot horizontal distance.

"**Design flow**" is the estimated daily wastewater flow expected to enter an OWTS for use in the design process.

"**Dispersal system**" is a leachfield, seepage pit, mound, at-grade, subsurface drip system, evapotranspiration and absorption system, or other types of systems for final wastewater treatment and subsurface discharge.

"Domestic wastewater" means the type of wastewater normally discharged from or similar to that discharged from plumbing fixtures, appliances and devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater does not include industrial-process wastewater.

"Domestic well" means any hole or shaft excavated or drilled into the earth for the purposes of use as a water supply well and is not a community water supply.

"**Effluent**" is the wastewater discharged from an OWTS treatment component or any portion thereof.

"Electronic deliverable format" (**EDF**) is the data standard adopted by the SWRCB for submittal of groundwater quality monitoring data to the SWRCB's internet-accessible database system.

"Evapotranspiration and absorbtion (ETA) bed" means a subsurface dispersal system that relies on soil capillarity and root uptake to disperse the effluent from a septic tank or supplemental treatment system through surface evaporation soil absorption and plant transpiration.

"**Exemption**" is an exception to these regulations, or a portion thereof, by the RWQCB in accordance with Article 6 of this Chapter.

"**Existing OWTS**" is an OWTS that was permitted by the applicable local authority before codification of this Chapter.

"**Failure**" is a condition of an OWTS that causes or threatens to cause impairment of beneficial uses of surface water or groundwater or threatens public health by creating a potential for direct or indirect contact between domestic wastewater or partially-treated domestic wastewater and the public. Examples of failure include:

1. Domestic wastewater backing up into a structure caused by slow soil absorption of septic tank effluent or a mechanical malfunction;
2. Domestic wastewater leaking from an OWTS to ground surface or groundwater and causing pollution or nuisance or posing an immediate health hazard;
3. Violation of water quality objectives for surface water or groundwater as established in basin plans.

"Fecal coliforms" are indicator bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests to indicate either contamination from sewage or the level of disinfection, generally measured as colonies/100 milliliters.

"**Fines**" are soil particles with a diameter less than 0.05 millimeters.

"**Groundwater**" is any subsurface body of water, including perched water. The listed beneficial uses of the State's groundwater is designated by each regional water quality control board and listed in the appropriate basin plan.

"General minerals" means the following elements or compounds commonly found in water and wastewater: Ca, Mg, Na, K, Fe, Cu, Mn, Zn, Sulfate, Chloride, Nitrate, Fluoride, and TDS and the following characteristics of water and wastewater: Hardness, Alkalinity, MBAS, and pH.

"Gravel-less chamber" system means a buried structure used to create a stone aggregate-free absorption area for infiltration and treatment of wastewater.

"**High-strength waste**" is wastewater from an establishment, home, or business having an average concentration of biochemical oxygen demand (BOD) greater than 300 mg/L or total suspended solids (TSS) greater than 300 mg/L.

Imported soil material:

"Leachfield" means one or a group of chambers or trenches designed to disperse effluent from a septic tank or supplemental treatment system.

"**Local agency**" means any agency having authority as provided by a county or city ordinance to regulate OWTS. This may include, but is not limited to, county/city health departments, building departments, or departments of public works.

"**Major repair**" means OWTS enlargement or corrective work necessary to eliminate a failure condition to an OWTS where such improvements involve the replacement, or modification of a septic tank, supplemental treatment unit, or dispersal system, excluding non-perforated distribution pipes, regardless of whether or not a failure condition exists.

"**Memorandum of understanding**" (**MOU**) is a formal agreement between the RWQCB and a local agency authorizing the local agency to administer this Chapter, or a portion thereof.

"**Mound system**" is an aboveground soil treatment, dispersal, and absorption system following an OWTS treatment unit. Mound systems have a subsurface discharge and specific design parameters.

"Mottling" is a soil condition characterized by spots or blotches or different color or shades of color interspersed with the dominant color as described by the United States Department of Agriculture soil classification system. Mottling can be indicative of historic high groundwater level.

"New OWTS" is a proposed or constructed OWTS permitted after the effective date of this Chapter.

"**Onsite wastewater treatment system(s)**" (**OWTS**) has the same meaning as found in §13290 of the California Water Code. The short form of the term is singular or plural, as appropriate.

"Operation permit" means a written document issued by the PA authorizing the permittee to operate and/or monitor an OWTS with supplemental treatment component. In local jurisdictions where the RWQCB is the PA, an operation permit shall be waste discharge requirements issued by the RWQCB and a construction permit for the OWTS must be separately obtained from the local agency.

"**Percolation test**" is a method of testing absorption properties of the soil (see §22955(c) for reference example).

"**Permit**" is the written document issued by the permitting authority authorizing the permittee to install and/or operate an OWTS. "Permit" means any one of the following:

1. A waste discharge requirement (WDR) or conditional waiver issued by the RWQCB; or
2. An operation permit issued by the ALA; or
3. A permit to construct issued by the ALA.

"**Permitting authority**" (**PA**) is a RWQCB unless a local agency has been authorized as an ALA by a RWQCB to administer this Chapter, in which case the ALA becomes the PA.

"**Person**" is any individual, firm, association, organization, partnership, business trust, corporation, company, or unit of local government.

"**Pretreatment**" is preliminary wastewater treatment occurring prior to discharge into any component of an OWTS. Pretreatment may include, but is not limited to, oil and grease removal, BOD and TSS reduction, screening, and/or detoxification. When pretreatment is used in the OWTS process, it is considered leachfield, seepage pit, mound, at-grade, subsurface drip system, or an evapotranspiration and absorption system as part of the overall OWTS.

"**Public health hazard**" is a condition whereby sufficient types and amounts of biological, chemical, or physical (including radiological) agents are present and likely to cause human illness, disorders, or disability. These agents include, but are not limited to, pathogenic viruses, bacteria, parasites, toxic chemicals, and radioactive isotopes.

"**Qualified professional**" is an individual who, by virtue of education, training, and experience, is qualified to perform soil and/or site evaluations and the design of OWTS. A qualified professional is capable of determining site-specific soil properties, geologic factors, and hydrologic conditions.

"**Qualified service provider**" is a qualified professional or an individual with knowledge and competency in OWTS operation, maintenance, and monitoring through experience and/or education.

"**Record Plan**" is the document submitted to the permitting authority providing "as-built" construction details of the OWTS, including but not limited to final placement of system components, sizes and specification of components.

"**Responsible management entity**" (**RME**) is a special district or private entity that manages the operation, monitoring, maintenance, repair, or oversight of individual or multiple OWTS. In some cases, an RME can also be an ALA.

"**Rock**" is any naturally formed aggregate of one or more minerals (e.g., granite, shale, marble); or a body of undifferentiated mineral matter (e.g. obsidian), or of solid organic matter (e.g., coal).

"**Sand**" is a soil separate and a type of soil texture. As a soil separate, sand is the individual rock or mineral fragments in soils having diameters ranging from 0.05 to 2.0 millimeters in diameter. As a soil texture, sand is the soil material that is comprised as 85 percent of more sand particles and not more than 10 percent silt and clay particles.

"**Scum**" is the layer of floating solids on the wastewater surface in a septic tank.

"**Seepage pit**" is typically a drilled or dug hole, 3 to 6 feet in diameter and 10 to100 feet deep, constructed to allow disposal of effluent from a septic tank or other OWTS treatment unit.

"**Septic tank**" is a watertight, covered receptacle designed for primary treatment of sewage and constructed to:

1. Receive wastewater discharged from a building;
2. Separate settleable and floating solids from the liquid;
3. Digest organic matter by anaerobic bacterial action;
4. Store digested solids; and
5. Clarify wastewater for further treatment with final subsurface discharge.

"**Septic tank effluent**" is wastewater discharged from a septic tank.

"**Setback**" is a minimum horizontal distance maintained between an OWTS feature and a potential point of impact or other physical point of reference.

"**Site**" is the location of the OWTS and, as deemed appropriate by the PA, a reserve area capable of disposing 100% of the design flow from all sources it is intended to serve.

"**Slope**" is the rate of fall or drop measured as percent of grade.

"**Soil**" is the naturally occurring body of porous mineral and organic materials on the land surface, and is composed of unconsolidated materials above bedrock. Soil is composed of sand-sized, silt-sized, and clay-sized particles mixed with varying amounts of larger fragments and organic material. The various combinations of particles differentiate specific soil textures identified in the USDA Soil Classification Chart. For the purposes of this Chapter, soil shall contain earthen material having more than 50 % of its volume composed of particles smaller than 0.08 inches (2 mm) in size.

"**Soil horizon**" is a roughly defined horizontal zone, generally defined as A, B, E, O, or C, developed by natural soil-forming processes within a soil profile and differing from vertically adjacent soil horizons within the same soil profile in such characteristics as color, structure, texture, consistence, and pH.

"**Soil permeability**" is the capacity of the soil to transmit liquids.

"**Soil structure**" is the arrangement of primary soil particles into aggregate particles or clusters that are separated by natural planes of weakness from adjoining compound particles or clusters.

"**Soil texture**" is determined by the relative amounts of fine earth fraction (sand, silt, and clay) as defined by the classes of the soil textural triangle developed by the United States Department of Agriculture and listed in Table 1a. A specific soil's classification may be modified when coarse fragments (greater than 2 millimeters) are present in sufficient number (i.e., gravelly sandy loam, cobbly clay) or when the soil is deemed compacted, as indicated by a bulk density test.

"Subsurface drip dispersal system" is a form of subsurface effluent dispersal using shallow distribution in combination with low-pressure drip emitters.

"**Supplemental treatment** " is any OWTS or component of an OWTS, except a septic tank or dosing tank, that performs additional wastewater treatment prior to discharge of effluent into the dispersal field. Supplemental treatment may be required where the site is not suitable for a conventional system. Supplemental treatment systems must meet the performance requirements of **§**22912.

"Total coliforms" is a group of bacteria consisting of several genera belonging to the family Enterobacteriaceae. The historical definition of this group has been based on the method used for detection (lactose fermentation) rather than on the tenets of systematic bacteriology.

"**Variance**" is a mitigated allowance by the PA for a site-specific exclusion from a requirement contained in this Chapter.

"**Weathered bedrock**" is rock that has been exposed to the atmosphere at or near the earth's surface and changed in color, texture, composition, firmness, and/or form as a result of the exposure with little or no transport of loosened or altered material. For purposes of this Chapter, weathered bedrock is not soil.

Authority Cited: CA Water Code § 13291. Reference: CA Water Code § 13291(b).

ARTICLE 2. GENERAL PROVISIONS

§22901. SWRCB -- Applicability and General Requirements.

(a) This Chapter applies to all new and existing OWTS.

(b) No person shall construct, relocate, expand, repair or replace, any OWTS or increase the pollutant concentration or quantity of the waste stream entering an OWTS without first filing an application for and obtaining a permit from the PA, unless said permits are not required by the PA.

(c) All OWTS shall comply with permit requirements issued by the PA

(d) Property owners subject to §22901(b) or the owner's authorized representative shall file an application (signed by the property owner) for a permit. All applications shall include a site evaluation report prepared by a qualified professional in

compliance §22955 contain in this Chapter. The site evaluation report and the OWTS design shall be submitted to the PA as part of a complete application for construction/operation.

(e) The PA shall deny any permit for a new OWTS or OWTS expansion that is not in compliance with the requirements of this Chapter.

(f) OWTS with supplemental treatment units installed after the effective date of this Chapter shall be issued operation permits. In the case of the sale of real property containing a unit subject to a operation permit, the seller shall, by delivery of a signed copy of the permit, relinquish his or her authority pursuant to the permit to the buyer. On or before the renewal date for the permit, the new permit holder shall notify the PA of the change of ownership.

(g) No portion or component of a new OWTS or OWTS subject to major repair shall be covered or buried without inspection or authorization by the PA.

(h) RWQCBs and the local agency can establish policies and regulations that are more protective of water quality than the requirements contained in this Chapter.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

§22902. SWRCB – OWTS Enforcement.

(a) All new OWTS and OWTS subject to major repair shall be operated and maintained in compliance with all permit requirements, if any, as issued by the PA and as provided in the applicable O&M manual.

(b) The PA may take enforcement action against an OWTS owner or operator for failure to comply with applicable monitoring or O&M requirements.

(c) The permit holder shall comply with all enforcement actions within the timeframe established by the PA.

(d) Upon revocation of a permit or enforcement action to cease discharge, the discharge from the source shall cease until the PA issues a new permit. The PA shall not issue a new permit, enforcement action or suspension until the OWTS is modified to achieve compliance.

(e) When a person violates the provisions in this Chapter, the PA may take the resulting enforcement actions, or any other proceeding authorized by law, including, but not limited to, any one or a combination of the following:

(1) orders requiring corrective measures necessary to comply with this Chapter;

(2) administrative penalties;

(3) citations;

(4) denial, suspension, modification, or revocation of permits; or

(5) orders to stop work and/or refrain from using the OWTS or portion of the OWTS.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

§22903. SWRCB -- Major Repairs.

(a) For existing OWTS that are failing or subject to major repair (as that term is defined in §22900), the PA shall take timely action to inform property owners of any non-compliance and shall direct corrective action to be accomplished within a specified time. The PA may require supplemental treatment where water quality objectives are violated due to the discharge of the OWTS. If, after consultation with the PA (if not the RWQCB), a RWQCB determines that the corrective action required by the PA is inadequate, the RWQCB shall take additional and necessary corrective action to repair the OWTS.

(b) In the course of a major repair, the PA may evaluate the entire OWTS. The PA may accept information from a qualified professional or qualified service provider about the performance and functioning of the OWTS, or any repairs deemed necessary as all or part of its evaluation.

(c) For OWTS constructed in compliance with the standards in this Chapter that are failing or subject to major repair, the PA shall take timely action to bring such OWTS into compliance with this Chapter. The PA shall inform the property owners of any required corrective action within a specified time. The PA may require supplemental treatment where water quality objectives are violated due to the discharge of the OWTS. If, after consultation with the PA (if not the RWQCB), a RWQCB determines that the corrective action undertaken by the PA is inadequate, the RWQCB shall take additional and necessary corrective action to solve the problem.

Authority Cited: CA Water Code §13291(b)(4). Reference: CA Water Code §13291(b)(4).

ARTICLE 3. OWTS REGULATORY OVERSIGHT

§22905. SWRCB -- Responsible Agencies.

The SWRCB and RWQCBs are the governmental bodies responsible for administering this Chapter. An ALA may also administer this Chapter pursuant to formal authorization from a RWQCB.

Authority Cited: CA Water Code §13291(e), §13240, §13225. Reference: CA Water Code §13291(e), §13240, §13225.

§22906. SWRCB -- SWRCB Functions and Duties.

(a) The SWRCB shall update the regulations and oversee statewide implementation of this Chapter.

(b) The SWRCB shall provide prospective ALAs with a draft application for local agency authorization to implement this Chapter within 30 calendar days of the effective date of this Chapter.

Authority Cited: CA Water Code §13291. Reference: CA Water Code §13291.

§22907. SWRCB -- RWQCB Functions and Duties.

The RWQCBs shall administer this Chapter through waste discharge requirements (WDRs) or conditional waivers of WDRs unless a local agency is authorized by a RWQCB to administer this Chapter, or a portion thereof. Prior to authorization for local agency implementation, a RWQCB shall review the local agency application for authorization to implement this Chapter and, if satisfactory, shall make a finding that the local agency is capable of implementing the requirements of this Chapter. A RWQCB shall authorize an ALA through an adopted resolution or an MOU.

(a) Each RWQCB shall incorporate the requirements of this Chapter by reference into the appropriate basin plan. A RWQCB may impose more protective requirements, as needed to protect water quality or human health.

(b) The RWQCB shall authorize a local agency to administer this Chapter or a portion thereof within 120 days after the application filing date unless the RWQCB makes at least one of the following determinations in writing to the ALA within 60 days of receipt of application:

(1) the RWQCB elects to retain administration of this Chapter;

(2) the RWQCB finds that the local agency's application is incomplete; in which case the local agency must resubmit the application before the RWQCB may approve it. In such cases, the 60 days specified in ¶(b) and the 120 day period for Board consideration begins anew after receipt of the corrected application; or

(3) the RWQCB finds that the local agency does not meet the qualification requirements listed in §22908 to administer this Chapter, or a portion thereof;

(c) The RWQCB shall review ALA implementation of this Chapter at least every five years.

(d) The RWQCB shall provide a minimum of 90 calendar days written notice to the ALA in cases when the RWQCB proposes termination of ALA authorization to administer this Chapter.

Authority Cited: CA Water Code §13269, 13291

§22908. SWRCB -- Authorized Local Agency Functions and Duties.

(a) An ALA shall administer this Chapter, or a portion thereof, as authorized by a RWQCB.

(b) An ALA shall provide a minimum of 90 calendar days written notice to the RWQCB prior to the termination of ALA administration of this Chapter.

(c) Where an ALA's jurisdiction is included in more than one Region, RWQCBs and the ALA shall attempt to establish one common authority to administer this Chapter.

(d) The ALA shall provide the following assurances or information in seeking authorization from a RWQCB to administer this Chapter:

(1) assurance that the permitting of all new OWTS meets or exceeds the requirements contained in this Chapter.

(2) a detailed description of the process for administering this Chapter.

(3) a commitment to annually submit electronically to the RWQCB a report summarizing the year's activity. The report shall address and/or contain, as a minimum, the following information:

(A) a listing of all new OWTS, including locations (e.g., street address);

(B) a listing of all repair permits issued, including locations (e.g., street address) with a summary of repair actions;

(C) all variances issued, including the nature and rationale of the variance, including locations (e.g., street address); and

(D) the number of water quality problems discovered, as the result of the ALA's program, including:

1. total number of investigations;

2. number of samples taken (including sample sites and date), and sample results;

3. date of inspection;

4. location (e.g., street address);

5. actions taken to address problems with failing OWTS, particularly failing OWTS adjacent to 303(d) listed waters;

6. any changes in local ordinances affecting how OWTS are regulated; and

7. other information available to the ALA that can be used by the RWQCB to assess the adequacy of the local program (e.g., septic tank pumping or monitoring records, resolved and unresolved complaints)

(4.) The ALA shall have qualifications and knowledge in all the following areas:

(A) permitting and inspection of OWTS;

(B) state policies and requirements and basin plans;

(C) soil and site evaluation;

(D) OWTS design, installation, performance, and monitoring; and

(E) design and operation of supplemental treatment systems, if the ALA permits such systems.

(5.) The ALA shall identify the criteria and the process to be used by the ALA for granting a variance from any individual requirement under Article 6 of this Chapter, consistent with RWQCB exemption criteria established pursuant to §22947;

(6.) The ALA shall maintain all site information as required under §22955;

(7.) The ALA shall investigate complaints regarding inadequate and/or failing systems;

(8.) The ALA shall have enforcement procedures necessary to obtain compliance with the requirements of this Chapter and permit conditions.

Authority Cited: CA Water Code § 13267(a), 13267(b)(1), 13291, 13291(b)(3)

ARTICLE 4 PERFORMANCE AND MONITORING

§22910. SWRCB -- General Standards.

(a) New OWTS and OWTS subject to major repair shall be operated to accept and treat flows of domestic wastewater excluding any material not generally associated with toilet flushing, food preparation, laundry and personal hygiene. Additionally, OWTS may be designed and operated to accept:

(1) wastewater from commercial establishments, facilities, and systems that exclude hazardous waste, as defined in Title 22 of the California Code of Regulations;

(2) wastewater from nonresidential facilities after use of pretreatment systems to reduce wastewater strength below high strength waste levels; and/or

(3) wastewater from nonresidential facilities that use waste segregation practices and systems to reduce pollutants entering the OWTS.

(b) New OWTS shall be operated and maintained to remove the following pollutants: biochemical oxygen demand, total suspended solids, fecal indicators, phosphorus, metals, and some synthetic organic compounds (SOC).

(c) All OWTS shall meet the following performance requirements:

(1) no discharge to the land surface from an OWTS shall result;

(2) the dispersal site shall not attract or be a source of vectors; and

(3) no odors constituting a nuisance shall result from any component of the OWTS.

(d) All new OWTS or OWTS subject to major repair shall be designed based on the expected influent wastewater quality and quantity and characteristics of the site and soils.

(e) Effluent discharged to the dispersal field shall not exceed the levels designated as high strength wastewater.

(f) New OWTS or OWTS subject to major repair shall be designed to prevent solids in excess of one-eighth (1/8) inch in diameter from passing to the dispersal system while under two feet of hydrostatic head. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed to meet this requirement.

(g) New OWTS and OWTS subject to major repair shall be designed to disperse effluent to subsurface soils in a manner that provides unsaturated zone treatment and aerobic decomposition of the effluent.

(h) Wastes from holding tanks, recreational vehicles, and portable toilets that contain materials deleterious and inhibiting to OWTS operation shall not be discharged to OWTS.

(i) A qualified professional shall perform evaluations for all new OWTS and OWTS subject to major repair, including a site investigation.

(j) A qualified professional shall design all new and repaired supplemental OWTS before a permit is issued to ensure compliance with the site suitability criteria identified in this Chapter.

(k) The owner or authorized representative shall provide appropriate notification of a site investigation as prescribed by the PA.

(l) A qualified professional shall design all new and repaired conventional OWTS.

(m) A Licensed General Engineering Contractor (Class A) or Sanitation System Contractor (Specialty Class C-42) shall construct all new OWTS in accordance with California Business and Professions Code Section 7056 and Section 83242, Article 3, Division 8, Title 16 of the California Code of Regulations. An owner-builder may construct a conventional system.

(n) A qualified professional shall inspect all new OWTS installations and installations for OWTS subject to major repair and shall prepare a Record Plan. The qualified professional shall certify in writing that the installation meets the design approved by the PA. The PA shall not issue the final approval until this certification is received.

(o) The owner or owner's authorized representative shall retain Record Plans and an Operation and Maintenance Manual of the OWTS upon completion of construction and shall submit Record Plans to the PA.

(p) The PA may conduct periodic inspections of any OWTS permitted under this Chapter. Such inspections shall include the overall OWTS conditions, mechanics, operational function, and dispersal system condition and operation.

(q) The PA may evaluate the treatment performance of any OWTS permitted under this Chapter by visual assessment or an assessment of water quality data from laboratory analysis of OWTS effluent or groundwater and/or surface water as appropriate.

(r) All new OWTS or OWTS repaired as a result of a failure condition shall have an O&M manual prepared by a qualified professional. O&M manuals shall include, but not be limited to:

(1) name, address, telephone number, business and professional license of the OWTS designer;

(2) name, address, telephone number, business and professional license of the OWTS installer;

(3) name, address, telephone number of an emergency contact person;

(4) instructions for proper use of the OWTS;

(5) Record Plan, together with a certification, for a conventional or pressure distribution style OWTS, that the system meets all applicable requirements under §22914(a);

(6) design flow and performance requirements for the OWTS;

(7) narrative description of the OWTS that includes: major components and their functions and design capacity;

(8) monitoring requirements to assess system performance;

(9) maintenance requirements, including suggested maintenance frequency;

(10) a list of substances that would impair performance if discarded into the OWTS; and

(11) where appropriate, O&M manuals shall include the following additional information:

(A) a parts identification and inventory list for supplemental treatment components;

(B) a trouble-shooting guide;

(C) a complete electrical wiring diagram that identifies components, and wire gage and color for supplemental treatment components and OWTS with pumps;

(D) a list of safety precautions directly related to the OWTS; and

(E) an emergency response procedure for system malfunctions (e.g., in response to an alarm indicating a system malfunction).

(s) All owners of a septic tank shall have a qualified service provider inspect the septic tank upon change of property ownership to ensure that the level of settleable solids and/or scum does not impair the performance of the septic tank. The owner shall maintain a record of inspections and maintenance. Where a septic tank has a filter to meet §22910(f), the Qualified Service Provider shall inspect the filter to ensure proper performance.

(t) When a septic tank is pumped, the owner shall have the system visually checked for malfunctions (e.g. broken baffles, leaking or broken inlet, outlet or sanitary tees, etc.).

(u) Owners with an onsite domestic well on their properties or with domestic wells adjacent to their properties must monitor groundwater in the vicinity of the OWTS discharge upon installation of a new OWTS or transfer of property ownership. The PA may require monitoring of groundwater prior to transfer of property ownership where the PA has reason to believe a problem exists. Monitoring groundwater can be conducted by sampling and analyzing water from a well down-gradient from the OWTS. Alternatively, monitoring groundwater can be conducted by sampling and analyzing water from an onsite domestic well. This requirement is waived if an onsite domestic well does not exist, and property owners deny access to adjacent domestic wells. Groundwater analyses shall be conducted in accordance with ¶(v). Owners of new OWTS shall have onsite groundwater sampled within 30 days of installation. Unless otherwise required by the PA, existing OWTS installations shall be exempt from this requirement if any of the following apply:

(1.) the facility that the OWTS serves is provided water from a community water supply system;

(2.) a study has been conducted by or approved by the PA, with the concurrence of the RWQCB. The study shall include an analysis of existing and relevant groundwater and surface water data that indicates no violation of water quality objectives due to the OWTS discharge is reasonably anticipated over the life of the OWTS;

(v) A laboratory certified by the Department of Health Services shall analyze domestic well water samples collected pursuant to ¶(u). The laboratory shall be capable of producing laboratory results in EDF format. The water samples shall be analyzed for general minerals and total coliforms. If a sample tests positive for total coliforms, the sample shall be analyzed for fecal coliforms. The name of the site owner, the site address and the laboratory results shall be transmitted to the SWRCB in EDF format. The PA shall have access to the laboratory results through the SWRCB's internet-accessible database. The names and addresses of owners of tested domestic wells will not be released to the general public pursuant to Section 1798.3 of the California Civil Code.

(w) The required performance evaluations, including maintenance of the OWTS, as specified by the O&M manual or permit shall be performed by a qualified service provider.

(x) All new or repaired OWTS dispersal systems shall be designed using the design flow estimates prescribed by the PA.

(v.) Where the percolation test rate is less than five minutes per inch and there is less than five feet separation to seasonal high groundwater as determined in Section 22955(d), the effluent from new OWTS shall use supplemental treatment systems that treat and disinfect OWTS wastewater to level prescribed in §22912(b) and §22912(c) prior to discharge to the dispersal field.

Authority Cited: CA Water Code §13260, 13264, 13267, 13269, 13291

§22911. SWRCB -- Septic Tank Specifications

(a) All newly installed septic tanks and grease interceptor tanks shall meet the following requirements:

(1) septic tanks shall produce a clarified effluent and provide adequate space for sludge and scum accumulations;

(2) all tanks shall be watertight, properly vented and constructed of solid, durable materials meeting the current standards of the industry. The following materials shall not be used to construct any tank:

(A.) wood products;

(B.) concrete block; or

(C.) steel, not including steel used for reinforced concrete;

(3) all tanks shall be placed on a solid or compacted level surface;

(4) septic tanks shall have at least two compartments, separated by a wall or baffle and with the inlet compartment consisting of not less than 67% of the total required capacity of the tank. Two appropriately sized single-compartment tanks in series may be used to meet this requirement;

(5) septic tanks shall have at least two access openings using risers that allow access to the tank interior meeting the following requirements:

(A.) each compartment shall have an access opening;

(B.) access openings shall be at least 20 inches in diameter;

(C.) access openings shall be secured (locked or equivalent) to prevent unauthorized access; and

(D.) access openings shall have watertight risers and shall be set at or near finished grade.

(6) prefabricated septic tanks shall be approved by the International Association of Plumbing and Mechanical Officials (IAPMO)and installed according to the manufacturer's instructions. If IAPMO certified tanks are not available locally, other prefabricated tanks may be approved by the PA and shall comply with subsection (a)(7) below;

(7) non- prefabricated tanks or prefabricated tanks not certified by IAPMO shall be constructed only after the design is stamped and certified by a California registered civil engineer as meeting the general industry standards necessary to comply with these requirements;

(8) the tanks shall be structurally designed to withstand all anticipated earth or other loads; and

(9) upon completion of installation, tanks shall be tested in place and certified watertight by the system installer.

(b) New and replaced septic tanks shall be designed to prevent solids in excess of one-eighth (1/8) inch in diameter from passing to the dispersal system while under two feet of hydrostatic head. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed to meet this requirement.

Authority Cited: CA Water Code § 13291

Reference: CA Water Code § 13291(b)(1)

§22912. SWRCB -- Requirements for Supplemental Treatment Components

(a) The dispersal systems of all new OWTS with supplemental treatment components shall be designed to ensure at least two feet of unsaturated soil below the bottom of the dispersal system and above either the seasonal high groundwater level, impermeable strata or fractured/weathered bedrock at all times.

(b) For purposes of complying with this Chapter, all supplemental treatment component effluent shall comply at the point of discharge to the dispersal field with the following BOD and TSS effluent limitations and, where nitrogen is a water quality concern as identified by the PA, the following nitrogen effluent limitation:

(1) The 30-day average of the samples for determining the BOD concentration shall not exceed 30 milligrams per liter (mg/L), or alternately, a Carbonaceous BOD (CBOD) in excess of 25 mg/L;

(2) The 30-day average of the samples for determining the average TSS concentration shall not exceed 30 mg/L;

(3) the 30-day average of the samples for determining the total nitrogen concentration shall not exceed 10 mg/L as nitrogen.

(c) Where supplemental treatment components of a new OWTS are designed to remove pathogens, the effluent from the OWTS shall be disinfected to achieve an effluent 30-day median fecal coliform bacteria concentration of not greater-than 200 MPN per 100 milliliters prior to discharge into the dispersal field.

(d) Before installation, all non-proprietary supplemental treatment components of an OWTS shall be certified by a qualified professional and approved by the PA.

(e) Before the installation of any proprietary supplemental treatment OWTS, all such treatment components shall be certified by an independent third party testing laboratory as being capable of reliably meeting the performance requirements in ¶(c) or ¶(d), as applicable. All certification information shall have supporting documentation, including the type of maintenance required to operate the OWTS in compliance with the performance requirements. Any modification to the component tested will result in the need for re-certification. The parameters required for certification shall include the following operational testing and evaluation of the supplemental treatment component:

(1) a testing duration of not less than 6 continuous months.

(2) the wastewater used for testing shall consist primarily of municipal or domestic wastewater and shall have concentrations in the following ranges:

(A) BOD: 125 to 300 milligrams per liter;

(B) TSS: 125 to 300 milligrams per liter;

(C) total nitrogen (as N): 20 to 75 milligrams per liter; and

(D) total coliforms: $1X10^6$ to $1X10^8$ MPN/100 ml.

(3) Hydraulic and organic design loading shall be varied during the test to simulate OWTS operational stress at different levels of use, including:

(A) regular daily use;

(B) work week use;

(C) weekend use; and

(D) vacation (e.g., one week rest).

(4) testing of supplemental treatment components to comply with the performance requirements of ¶(c) shall be conducted based on effluent analyses of BOD, TSS and TN with the following minimum detection limits:

Parameter	Detection Limit
BOD	2 mg/L
TSS	5 mg/L
Total Nitrogen	1 mg/L

(5) testing of supplemental treatment components to comply with the performance requirements of ¶(d) shall be conducted based on effluent analyses of fecal coliforms with minimum detection limit of 2.2 MPN.

(f) The effluent from a supplemental treatment component shall be evaluated quarterly, or more frequently as required by the PA or the O&M manual, based on an analysis of a representative sample from a point after the supplemental treatment component. Effluent samples shall be analyzed by a California Department of Health Services certified laboratory using the reporting limits specified in ¶(f)(4). Testing of supplemental treatment components that perform chemical/physical disinfection treatment shall be evaluated based on analysis of fecal coliforms with a minimum detection limit of 2.2 MPN

(g) If the results from an evaluation of the effluent from a supplemental treatment component exceed the 30-day limits specified in either ¶(c) or ¶(d) by 100 percent, the results shall be immediately reported to the PA and modifications to the OWTS or OWTS process shall be made within 60 calendar days of the date of evaluation to bring the OWTS into compliance with this Chapter.

(i) The following management requirements shall be implemented for all OWTS with supplemental treatment components:

(1) The PA shall issue an operation permit requiring the permit holder to maintain a contract with a qualified service provider for operation, maintenance and monitoring of the OWTS.

(2) The operation permit may be issued to a responsible management entity (RME) that performs all O&M functions for a privately owned OWTS. In such cases, the owner of the OWTS shall be listed on the permit as a responsible entity in addition to the RME.

Authority Cited: CWC 13267, 13291. Reference: CA Water Code §13260, 13264, 13267, 13269, 13291..

§22914. SWRCB -- Dispersal Systems

(a) The qualified professional shall exercise all feasible design options to assure that the base of the dispersal system lies at the shallowest practicable depth at or below the original elevation of the soil surface to maximize elements critical to effective treatment of effluent in the soil (e.g. oxygen transfer, biological treatment, and vegetative uptake of nutrients). The qualified professional shall assure that the system meets all applicable requirements for this new section in the design.

(b) All dispersal systems, except for seepage pits as provided in §22914(l), shall be designed using bottom area of the dispersal system only as the infiltrative surface. The infiltrative surface shall be sized using the design application rates contained in either Table 1a or Figure 1.

Figure 1: Design Infiltrative Surface Application Rates

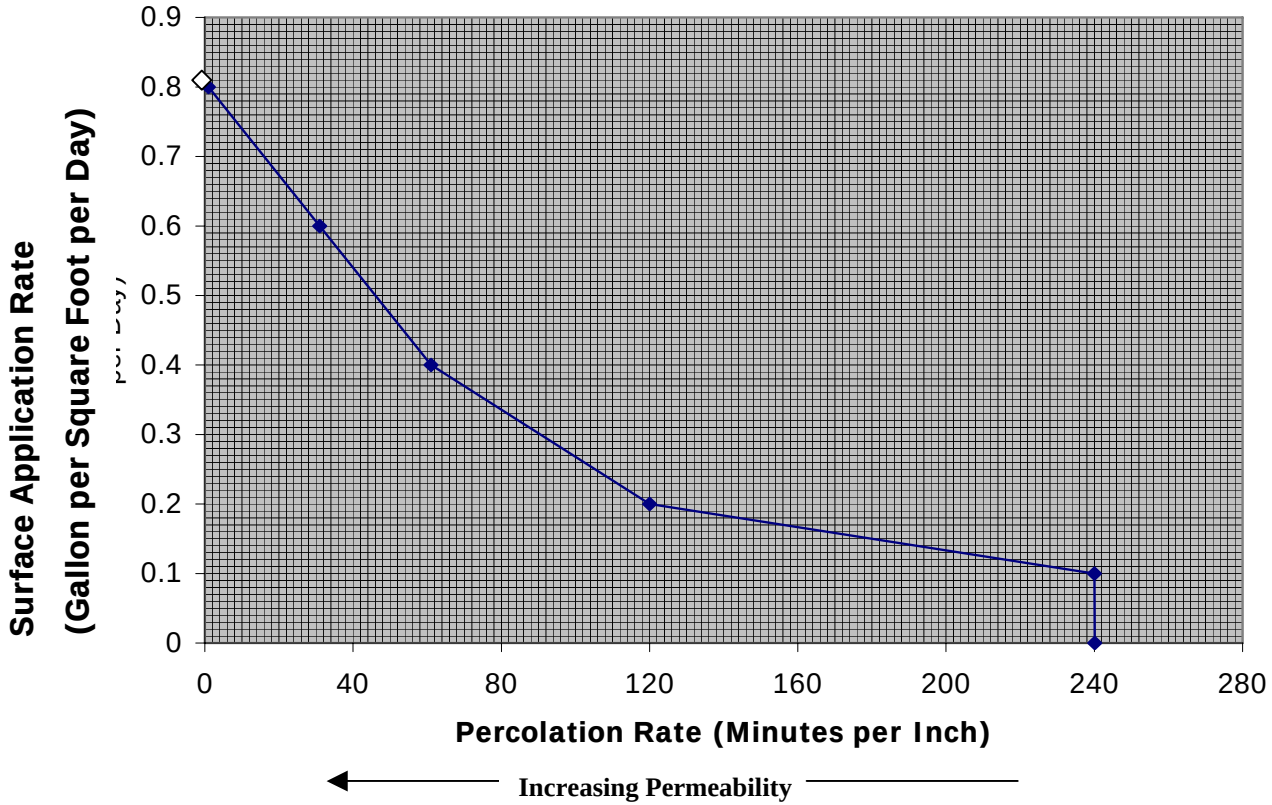

Table 1: Design Infiltrative Surface Application Rates

USDA Soil Texture Classification	Structure	Grade	Maximum Wastewater Application Rate (gallons per day per square foot)
Gravel, Gravelly Coarse Sand, Coarse Sand	Single grain	Structureless	Prohibited
Sand, Loamy Coarse Sand, or Loamy Sand[1]	Single grain	Structureless	0.8
Loamy Fine Sand or Loamy Very Fine Sand[1]	Single grain	Structureless	0.4
Coarse Sand Loam or Sandy Loam	Massive	Structureless	0.2
	Platy	Weak	0.2
		Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Fine Sandy Loam or Very Fine Sandy Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Silt Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Sandy Clay Loam, Clay Loam, or Silty Clay Loam[1]	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Sandy Clay, Clay, or Silty Clay[1]	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	Prohibited
		Moderate, Strong	0.2

[1]This soil type shall be subject to a percolation test in addition to using soil texture determination methodology. The lesser of the two application rates in either Figure 1 or Table 1 shall be used for design.

(c) Dispersal systems shall be sited in soils that are suitable for new and repaired OWTS operation. Where soils consist of greater than 10 % rock fragments (cobbles, stones and gravel), the dispersal system area shall be increased in proportion to the percent of rock fragments to compensate for the lost treatment volume, as approved by the PA.

(d) Where the site consists of sandy or loamy sand soils or where the percolation rate measurement is less than five minutes per inch, the amount of soil beneath a dispersal system and above the seasonal high groundwater level as required in this Section shall be increased in accordance to the requirements specified by the PA.

(e) Unless prescribed otherwise by the PA, new conventional OWTS dispersal systems shall have at least five feet of continuous soil below the bottom of the dispersal system and above the seasonal high groundwater level or fractured/weathered bedrock at all times. The PA and RWQCB may allow less than five feet but not less than three feet of continuous soil if a qualified professional demonstrates that water quality in the immediate vicinity of the OWTS will not be impaired due to pathogens as a result of the OWTS discharge, as approved by the PA. In addition, conventional new OWTS dispersal systems shall comply with the following:

(1.) Pump systems used to move effluent from the septic tank to the dispersal system shall be equipped with alarms that notify the owner in the event of pump failure. All pump systems shall, at a minimum, provide for storage during a 24-hour power outage or pump failure and shall not allow an emergency overflow discharge.

(2) Rock and gravel used for disposal trenches and beds that are easily decomposed are prohibited. All drain rock and gravel used for OWTS dispersal system construction shall be washed to remove fines. Any drain rock or gravel that is greater than 5% fines (passing through a No. 200 sieve) or, as otherwise determined by the ALA to contain excessive amounts of fine particles is prohibited.

(3) All smeared or compacted soil surfaces in the sidewalls or bottom of leach line excavation shall be scarified to the depth of smearing or compaction and the loose material removed prior to placement of dispersal system.

(4) Dispersal systems with two or more leach lines shall use a distribution box or other manifold system approved by the ALA to promote equal distribution throughout the dispersal field. Systems with greater than 500 feet of leachfield trench being dosed with septic tank effluent at one time shall be equipped with some form of pressure dosing.

(5) Dispersal systems on sloping ground (greater than 4% slope) shall be designed to prevent the premature failure of the lowest trench. Systems on sloping ground may use relief-line systems to avoid slope-related dispersal system failure.

(f) Pressure distribution systems shall have a minimum of three feet of continuous soil beneath the bottom of the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times, and shall meet the following minimum requirements:

(1) tanks, risers, and lids for all pump vaults shall be structurally sound, watertight and store wastes in a manner that will not create odors or vector attraction;

(2) pump systems used to move effluent from the septic tank to the dispersal system shall be equipped with alarms that notify the owner and qualified service provider (i.e. remote dial-out) in the event of pump failure. All pump systems shall, at a minimum, provide for storage during a 24-hour power outage or pump failure.

(3) all pressure distribution systems shall be issued an operation permit.

(g) Mound systems shall incorporate a minimum of 12 inches of clean sand or equivalent (e.g. ground glass) meeting criteria in Table 2 or Table 2 items 1,2, and 3 in addition to ASTM Standard C-33 sand placed on the original soil surface. All mounds shall have a minimum of two continuous feet of soil beneath the mound and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times. In addition, mound systems shall meet the following requirements:

(1) all mound systems shall have groundwater monitoring wells for evaluating system performance, with locations and construction detail as required by the PA; and

(2) all mound systems shall be maintained to minimize erosion, slumping, or damage to the soil cover;

(3) all mound systems shall be issued an operation permit.

(4) Soil moisture conditions during mound construction shall not be at levels when the soil will smear during construction.

(5) All trees within the mound design area boundary shall be cut to ground level and all vegetation in said boundary shall be removed by rake and/or mowing. Tree stumps shall be cut off at ground level rather than disturbing the native soil by removing them.

(6) The mound area shall be prepared by using a spring-loaded agricultural chisel plow and plowing parallel to land contour. Shallow hand spading the surface can be performed as acceptable alternative. Rototilling shall not be used as an acceptable substitute.

(7) Trucks, tractors and backhoes with rubber-tired or steel wheels shall be driven over the mound design boundary or immediately downslope of the mound.

(8) The fill material

(9) Fill material shall be placed in position with a track-type tractor or by hand and shall be compressed by track rolling. The top of all fill material be leveled to ½ inch by hand and sides shall be sloped no greater than 3:1.

Table 2: Required Mound Sand Filter Specifications

1. Max. Percolation	Min. Percolation
16	90
2. Maximum Percent soils smaller than 0.53 mm in diameter.	
5%	
3. Maximum Percent fragments over 2.0 mm. In diameter.	
20%	
4. Sieve Size	Dry Weight % Passing
3/8	100
4	90-100
10	65-100
16	50-85
30	25-60
50	10-30
100	2-16
200	0-7

(h) At-grade systems shall have a minimum of five continuous feet but no less than three feet of soil beneath the dispersal system and above high seasonal high groundwater, impervious layer of soil or rock, or fractured/weathered bedrock at all times, and shall have a minimum of 12 inches of soil cover over the dispersal system. The PA may allow a lesser

separation but not less than 3 feet from high seasonal high groundwater, impervious layer of soil or rock, or fractured/weathered bedrock, as allowed by the RWQCB. All at-grade systems shall be issued an operation permit.

(i) Evapotranspiration and absorption systems shall have a minimum of three continuous feet of soil beneath the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times and shall be designed such that evaporation and absorption exceed the design waste flow combined with a 25-yr return rate precipitation event on an annual and seasonal basis. Evaporation and absorption systems shall meet the following requirements:

(1) no ponding shall occur beyond the perimeter of the systems.

(2) no vectors shall be attributable to the systems; and

(3) no nuisance odors shall be attributable to the systems.

(4) all evapotranspiration and absorption systems shall be issued an operation permit.

(j) Gravel-less chambers shall meet all requirements for conventional dispersal systems contained in ¶(e). Gravel-less chamber systems shall meet the following minimum requirements:

(1) All gravel-less chamber system shall be designed and installed to distribute the wastewater in parallel or in relief line designs.

(2) The liquid storage capacity or the storage capacity of the gravel-less chamber system must be greater or equal to that available in a new conventional OWTS contained in ¶(e); and

(3) The structural integrity of the gravel-less chamber system shall be tested and shall conform to the performance requirements set forth in the International Association of Plumbing and Mechanical Officials (IAPMO) Material and Property Standard for Plastic Leaching Chambers IAPMO PS 63-2004. Performance testing per IAPMO PS 63-2004 shall be conducted by an organization that holds an up-to-date certification with IAPMO.

(k) Subsurface drip systems shall have a minimum of two continuous feet of soil beneath the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times. In addition, subsurface drip systems shall meet the following requirements:

(1) all subsurface drip systems shall have a minimum of 6 inches of soil cover over the dispersal system;

(2) all effluent dispersed in a subsurface drip system shall meet the performance requirements in §22912(b);

(3) distribution lines shall be installed in “closed loop” networks and shall include flow control valves on the supply lines and return lines for periodic flushing;

(4) pumps shall be sized to accommodate the expected discharge rate and the flow rate needed for line flushing;

(5) all systems shall be maintained to reduce emitter biological growth plugging and root intrusion;

(6) all distribution networks shall be equipped with a vacuum release valve to reduce the amount of soil particles entering effluent emitter orifices;

(7) all system components shall be warranted by the manufacturer for use with domestic wastewater and for resistance to root intrusion;

(8) system emitters shall not have a rated discharge in excess 1.3 gallons per hour. Emitter discharge rate may be controlled either by use of pressure-compensating emitters or with a pressure regulator; and

(9) all system distribution lines shall be color-coded purple to identify that the line contains non-potable water from a sewage source.

(10) All subsurface drip systems shall be issued an operation permit.

(l) Seepage pit installations shall be designed on sidewall area and allowed only where all of the following conditions apply:

(1) where one of the following conditions exists:

(a) the site is served by a community water supply and has no domestic wells within 600 feet of the OWTS, or

(b) the site is served by a community water supply and the site is within 600 feet of a domestic well and the new OWTS provides treatment that meets the performance requirements in §22912(b) prior to discharge into the seepage pit, or

(c) the site meets the following:

1. it is an existing parcel approved for OWTS at the time of lot creation;

2. it has an onsite domestic well that is sealed at 20 feet below the depth of the bottom of the seepage pit; and

3. the new OWTS provides treatment that meets the performance requirements in §22912(b) prior to discharge into the seepage pit.

(2) the site evaluation demonstrates to the satisfaction of the PA that a shallow dispersal system is unsuitable due to soil or spatial conditions; and

(3) the seepage pit design allows a minimum of ten feet of soil below the bottom of the seepage pit and above the seasonal high groundwater level, impervious layer, or fractured/weathered bedrock. The discharger shall demonstrate that all strata to a depth of 10 feet below the pit bottom are free of groundwater in accordance with §22955(d). The PA may allow a lesser depth of soil below the bottom of the seepage pit, but no less than two feet of soil, provided that the effluent meets the performance requirements for supplemental treatment in §22912(b).

(m) The PA may allow imported soil material for use in complying with depth of soil requirement for dispersal systems and supplemental treatment systems. Imported soil material must meet the minimum specifications in Table 2. Imported soil material shall be placed using the construction standards contained in §22914(g)(4) to §22914(g)(9). All systems with imported soil or equivalent shall use a supplemental treatment system meeting the requirements in §22912(b).

§22915. SWRCB -- Fats, Oils and Grease (Interceptors and Traps).

(a) Influent to a new OWTS shall not contain total fats, oils, or grease (FOG), alone or in combination, in excess of 90 mg/L.

(b) If the influent to the new OWTS exceeds or is anticipated to exceed a FOG concentration of 90 mg/L, a grease interceptor or grease trap shall be placed upstream of the OWTS. All grease interceptors shall have at least two access risers, one over the inlet and one over the outlet, with lids secured at finish grade (land surface elevation) for system inspection and maintenance. Grease interceptor systems shall be designed in accordance with Appendix H, Part 5, Title 24 of the California Code of Regulations. Grease interceptors shall be placed outside the facility.

(c) The PA shall require periodic inspections of grease interceptors and grease traps.

(d) Grease interceptors and grease traps shall be maintained to remove accumulated scum and sludge at frequencies necessary to ensure proper operation.

Authority Cited: CA Water Code § 13291. Reference: CA Water Code §

ARTICLE 5: PROTECTING IMPAIRED SURFACE WATER AND GROUNDWATER

§22940. SWRCB -- Provisions for Protecting Impaired Surface Water.

The following requirements apply to all OWTS within 600 feet of impaired surface water where OWTS have been identified by the RWQCB as contributing to the specific impairment of that surface water pursuant to Section 303(d) of the Clean Water Act.

(a) Where surface water is listed as impaired due to nitrogen and OWTS have been identified as contributing to the nitrogen impairment, the following shall apply:

(1) all permits issued after January 1, 2007, for new OWTS installations shall incorporate the performance requirements for supplemental treatment in §22912(b);

(2) all existing OWTS shall be upgraded or replaced by January 1, 2009, to meet the performance requirements of §22912(b)(1) unless a groundwater monitoring report prepared under the responsible charge of a California registered

professional engineer or California registered professional geologist approved by the PA demonstrates that the nitrogen from existing OWTS are not contributing to the impairment.

(3) all existing OWTS may be exempt from the requirements in §22940(a)(2) where the PA and RWQCB establish a greater or lesser distance than 600 feet based on a groundwater monitoring report. The groundwater monitoring report shall be prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and shall demonstrate that the proposed distance is a more accurate estimate of OWTS impact on the impaired water body. In such cases, those OWTS identified by the RWQCB as contributing to the impaired water body shall meet the performance requirements of §22912(b).

(b) Where surface water is listed as impaired by the RWQCB due to pathogens and OWTS have been identified as contributing to the pathogen impairment, all the following shall apply:

(1) all permits issued after January 1, 2007, for new OWTS shall incorporate performance requirements for supplemental treatment in §22912(b)(1), §22912(b)(2) and §22912(c).

(2) all existing OWTS shall be upgraded or replaced by January 1, 2009, with OWTS that meet the performance requirements of §22912(b)(1), §22912(b)(2). and §22912(c) unless a groundwater monitoring report prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and approved by the PA demonstrates that the pathogens from existing OWTS are not contributing to impairment.

(3) all existing OWTS may be exempt from the requirements in §22940(b)(2) where the PA and RWQCB establish a greater or lesser distance than 600 feet based on a groundwater monitoring report. The groundwater monitoring report shall be prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and shall demonstrate that the proposed distance is a more accurate estimate of OWTS impact on the impaired water body. In such cases, those OWTS identified by the RWQCB as contributing to the impaired water body shall meet the performance requirements of §22912(b)(1) and §22912(b)(2).

(c) OWTS owners who commit by way of a legally binding document signed on or before January 31, 2009 to connect to a centralized community wastewater collection and treatment system by a specified date no later than December 31, 2015 are exempt from this Section.

(d) The compliance dates for existing OWTS in (a) and (b) may be extended as a part of an implementation schedule for a Total Maximum Daily Load (TMDL), adopted prior to January 31, 2009. In no event shall the compliance dates exceed December 31, 2015.

§22945. SWRCB -- Provisions for Protecting Impaired Groundwater

Where OWTS have been identified as causing or contributing to groundwater pollution or contamination, the ALA and RWQCB shall meet and confer to identify corrective actions and an implementation schedule. Actions for consideration shall include, but not be limited to the following:

(a) increased OWTS oversight;

(b) preparation of a cumulative impact analysis;

(c) use of a centralized wastewater collection system;

(d) enactment of a building moratorium in the area of the pollution or contamination; or

(e) mandate for use of supplemental treatment for new and existing OWTS.

ARTICLE 6: RWQCB EXEMPTIONS AND AUTHORIZED LOCAL AGENCY (ALA) VARIANCES

§22946. SWRCB – General Variances

The PA may issue variances for the replacement dispersal field required pursuant to §22955(a)(4)(A), or new OWTS where such OWTS are designed to provide supplemental treatment pursuant to §22912 of this Chapter.

§22947. SWRCB -- RWQCB Procedure for Establishing Exemptions.

A RWQCB may amend its basin plan establishing criteria and procedures for exemptions from this Chapter, or portions thereof. All such exemptions shall not be less protective of water quality or human health within the particular location or area subject to the exemption than provided for in this Chapter.

Authority Cited: CA Water Code §13291, 13240, 1242, 13243**.**

§22948. SWRCB -- ALA Procedure for Establishing Variances.

An ALA may issue variances from this Chapter consistent with the exemptions established pursuant to §22947 . Variances issued by the ALA for specific sites shall conform to all RWQCB exemption requirements.

Authority Cited: CA Water Code §13291**.**

ARTICLE 7. SITE EVALUATION

§22955. SWRCB -- Site Evaluation.

(a) The site evaluation report as required in §22901(d) shall include the following:

(1) street address (if applicable) of the OWTS site and assessor's parcel number;

(2) name, address, and telephone number of the property owner and owner's agent (if applicable);

(3) soils information as specified in ¶(b) and¶(c) of this section;

(4) plot map(s) including the following items, as applicable:

(A) scale or dimensions of the site with the OWTS and 100 % replacement field shown;

(B) North arrow (Magnetic North);

(C) property line corners and dimensions;

(D) setbacks required by local ordinance and regulations;

(E) ground slopes and direction;

(F) paved and unpaved routes for vehicular traffic;

(G) public and private easements;

(H) location of structures, including but not limited to dwellings, garages, out-buildings, swimming pools, patios and decks;

(I) location of water lines and utilities;

(J) delineation of areas known to be subject to flooding or seasonal inundation;

(K) location of known wells and surface water bodies within 600 feet of the proposed OWTS;

(L) location of any existing failed OWTS on the subject parcel, where applicable;

(M) proposed location of the OWTS ;

(N) location of trees within 10 feet of proposed dispersal area or as deemed appropriate by the PA;

(O) location of cutbanks or bluffs onsite within 100 feet of the OWTS;

(P) location of soil evaluation sites; and

(Q) a vicinity map, if required by the PA.

(5) OWTS design identified in ¶(e) of this section.

(b) For the purposes of complying with the requirements in §22914, site soils in the dispersal area shall be determined through direct evaluation. The number and location of the evaluations shall be sufficient to adequately characterize soil conditions. Soils profile information shall be determined through direct observation using the following:

(1) the following factors shall be observed and reported from the ground surface to a limiting condition, up to a minimum of three feet below the bottom of the dispersal system using the methods contained in¶(b)(2) below:

(A) thickness and coloring of soil layers, soil structure, and texture according to United States Department of Agriculture (USDA) classification system, including identification of soil horizon classifications;

(B) depth to a limiting condition such as hardpan, rock strata, impermeable soil layer or saturated soil conditions;

(C) depth to observed groundwater if observed at levels at or within three feet of the limits specified for the proposed dispersal technology, as listed in §22914.

(D) depth to a description of soil mottling; and

(E) other prominent soil features which may affect site suitability such as coarse fragments, consistence, roots and pores and moisture content; and

(2) Soil conditions shall be determined by conducting a soil evaluation using either of the two practices:

(A) soil profile excavation in the area of the primary dispersal system *(e.g., Standard Practice for Subsurface Site Characterization of Test Pits for On-Site Septic Systems: ASTM 5921-96)*; or

(B) augered test hole evaluations may be *conducted (e.g., Standard Practice for Soil Investigation and Sampling by Auger Borings ASTM 1452-80)* where the PA determines one of the following:

(A) the use of an excavation vehicle is impractical because of access limitations or soil conditions, including depth of proposed system; or

(B) testing is necessary only to verify conditions expected on the basis of prior soils investigations; or

(C) testing is done in conjunction with geologic investigations; and

(c) Site soils permeability in the dispersal area shall be determined through direct evaluation. The number and location of the evaluations shall be sufficient to adequately characterize soil permeability. Soil permeability shall be determined by one or more of the following methods:

(1) percolation tests shall be conducted using general industry standards *(e.g. Table 3-8, Design Manual: Onsite Wastewater Treatment and Disposal Systems, EPA 625/1-80-012, Office of Water Program Operations, Office of Research and Development, USEPA, 1980; Procedure for Percolation Tests Developed at Robert A. Taft Sanitary Engineering Center, p.4, Manual of Septic Tank Practice, Public Health Service Publication No. 526, U.S. Department of Health, Education, and Welfare, 1967; Recommendations for a Refined Percolation Test, Appendix, Guidelines for Mound Systems, State Water Resources Control Board, 1980) or as determined by the PA.*

(2) soil texture analysis for each soil horizon to the level of effective soil treatment shall be analyzed using standard practices for field texture evaluation *(e.g., Standard Test Method for Particle-Size Analysis of Soils ASTM D 422-63)*.

(d) Unless the seasonal high groundwater level in the vicinity of the site is known to be greater than 10 to 15 feet below the ground surface (based on a local groundwater study), a site evaluation to determine the depth to the seasonal high groundwater shall be performed. The number and location of groundwater monitoring wells shall be sufficient to adequately characterize site soil conditions. Groundwater levels shall be determined using the following protocol prior to design and installation of an OWTS:

(1.) To measure depth to seasonal high groundwater, a groundwater level monitoring well shall be installed to a minimum depth of ten feet in the vicinity of proposed wastewater dispersal system. If an impermeable layer is present at depth of less than ten feet below the ground surface, the depth of the groundwater level monitoring well shall be decreased accordingly, as approved by the ALA and/or the RWQCB. For projects other than single family homes, the ALA and/or the RWQCB shall determine the number and depth of groundwater level monitoring wells.

(2.) Measurements of depth to seasonal high groundwater shall take place when the following occur:

(A.) a minimum of 80% of the average annual rainfall has fallen based on records of seasonal rainfall accumulations from the nearest weather stations. If a groundwater monitoring program demonstrates to the satisfaction of the PA that groundwater levels in its area of its jurisdiction are not subject to large seasonal variations, the percent of required rainfall prior to groundwater level measurements may be reduced appropriately. In no case shall the percentage of required rainfall be less than 60 percent of the average annual rainfall.

(B.) a minimum amount of rainfall equaling at least 10% of the average annual rainfall has occurred within 30 calendar days immediately preceding the date of a measurement.

(C.) the groundwater level shall be measured on a minimum of three separate days that meet the criteria established in (A) and (B).

(3.) For areas that are subject to special circumstances such as seasonal high groundwater caused by snowmelt or irrigation, the ALA shall propose a groundwater level monitoring program for the approval of the RWQCB.

(4.) saturated conditions caused by significant rain events that occur more than once during the evaluation of seasonal ground water levels shall provide one basis for determination of seasonal high groundwater.

(5.) Soil mottling observations may be used to determine the seasonal high groundwater level when such determinations can be made to the satisfaction of the ALA and RWQCB.

(e) An OWTS design shall include drawings, an O&M manual, calculations, and related technical information in sufficient detail to substantiate that the proposed OWTS conforms to the siting, design, and performance requirements contained in this Chapter as applicable and with any additional requirements of the PA.

Scoping Report and Summary of Comments

Scoping Report and Summary of Comments

for the

State Water Resources Control Board's On-site Wastewater Treatment System Regulations

STATE of CALIFORNIA

Prepared by:

EDAW

October 2005

P 02110030.01-02

I. OVERVIEW

This document is a summary of comments received by the State Water Resources Control Board (State Water Board) during the scoping process mandated under the California Environmental Quality Act (CEQA) for the On-site Wastewater Treatment System Regulations project. Many of these comments were provided by attendees at five scoping meetings held in Riverside, Santa Rosa, Malibu, Sacramento, and Redding, California. The rest were provided in writing during the 60-day scoping period, which closed on August 8, 2005.

On-site wastewater treatment systems (OWTS) treat wastewater and discharge effluent. Working with stakeholders for more than 2 years, the State Water Board drafted statewide regulations for siting, installation, operation, and maintenance of OWTS. The State Water Board is required to draft and implement such regulations under Assembly Bill 885, which was approved by the California State Legislature and signed into law in September 2000 and was codified as Sections 13290-13291.7, Chapter 4.5, Division 7 of the California Water Code.

In accordance with CEQA (Pub. Res. Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.), the State Water Board issued a Notice of Preparation of an Environmental Impact Report (NOP) and an Initial Study (IS) to solicit input regarding the potential environmental effects of implementing the proposed OWTS regulations. An IS is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with State CEQA Guidelines Section 15064(a), an environmental impact report (EIR) must be prepared if there is substantial evidence (including the results of an IS) that a project may have a significant effect on the environment. Based on the results of the IS, the State Water Board determined that an EIR will be prepared for this project. For this reason, an NOP was issued along with the IS.

II. SCOPING PROCESS

The IS/NOP was available for a 60-day public review period beginning on June 8, 2005, and ending on August 8, 2005. During the public review period, a series of public scoping meetings was held to inform agencies and the public about the proposed project and to provide opportunity for public comment on the IS/NOP and issues to be evaluated in the EIR. Five public scoping meetings were held:

City	Place	Address	Date
Riverside	Art Pick Council Chamber	3900 Main Street	Thursday, July 14
Santa Rosa	North Coast Regional Water Board Hearing Room	5550 Skylane Boulevard, Suite A	Monday, July 18
Malibu	Council Chambers	City Hall 23815 Stuart Ranch Road	Tuesday, July 19
Sacramento	Sierra Hearing Room, 2nd floor	Cal-EPA Building 1001 I Street	Wednesday, July 20
Redding	City of Redding Community Room	777 Cypress Avenue	Thursday, July 21

Comments (either written or verbal) were solicited from agencies and other interested parties.

III. INFORMATION ABOUT PUBLIC COMMENTS AND COMMENTERS

During the public comment period, written comments were received from 98 parties:

- 2 state agencies
- 35 local and regional agencies
- 20 organizations
- 10 private companies
- 31 private individuals

In addition, articles about the project, the IS/NOP, and the public scoping sessions were submitted to the State Water Board from 11 news publications around the state.

At the five public scoping meetings, a total of 304 people signed in as attending. Of those, 85 people spoke. Participation at the meetings was as follows:

Location	Attendees	Speakers
Riverside	40	12
Santa Rosa	120	29
Malibu	38	13
Sacramento	37	18
Redding	69	13
Total	304	85

Table 1 identifies the state and local agencies, organizations, businesses, and individuals that provided written or verbal comments on the IS/NOP. Publications that addressed the project, the IS/NOP, or the scoping meetings are listed as well.

Table 1
OWTS IS/NOP Commenters (Written and Oral)

Category	Commenter
State Agencies	Delta Protection Commission
	Regional Water Quality Control Board-Lahontan Region
Local Agencies	Amador County Board of Supervisors
	Calaveras County Building Department
	Contra Costa Environmental Health Department
	Del Norte County Board of Supervisors
	Del Norte County Community Development Department
	Fresno County Department of Community Health
	Humboldt County Department of Health and Human Services
	Imperial County Board of Supervisors
	City of La Canada Flintridge Public Works Department
	Lake County Board of Supervisors
	Los Angeles County Chief Administrative Office
	Los Angeles County Department of Health Services
	Los Angeles County Department of Public Works

Table 1 (continued)
OWTS IS/NOP Commenters (Written and Oral)

Category	Commenter
	Los Angeles Regional Water Quality Control Board
	Los Osos Community Services District
	Marin County Community Development Agency
	Mariposa County Public Health Department
	Modoc County Board of Supervisors

Table 1 (continued) OWTS IS/NOP Commenters (Written and Oral)	
Category	**Commenter**
	Modoc County
	Monterey County Department of Health
	Napa County Board of Supervisors
	Napa County Department of Environmental Management
	Nevada County Board of Supervisors
	Orange County Planning & Development Services Department
	Plumas County Public Health Agency
	City of Riverside
	City of Riverside Public Utilities Department
	Sacramento County Environmental Management Department
	San Joaquin County Environmental Health Department
	San Luis Obispo County
	Santa Barbara County Public Health Department
	City of Santa Cruz Water Department
	Santa Cruz County Environmental Health Department
	Santa Cruz County Health Services Agency
	Santa Cruz County Public Health Department
	Santa Monica Bay Restoration Commission
	Shasta County Department of Resource Management
	Shasta County Division of Environmental Health
	Shasta County Planning Commission
	Sierra County Board of Supervisors
	Sierra County Environmental Health Department
	Siskiyou County Department of Public Health
	Solano County Department of Resource Management, Environmental Health Division
	Sonoma County Board of Supervisors
	Sonoma County Department of Health Services
	Sonoma County Public and Resource Management Department, Well and Septic Division
	Sweetwater Springs Water District
	Tehama County Board of Supervisors
	Ventura County Environmental Health Division
Organizations	Access for All
	Anza Valley Building Association
	California Association of Realtors
	California Conference of Directors of Environmental Health
	California Environmental Health Association
	California Onsite Wastewater Association
	California Rural Water Association
	California State Association of Counties

Table 1 (continued) OWTS IS/NOP Commenters (Written and Oral)	
Category	**Commenter**
	California Travel Parks Association, Inc.
	CCDEH/COWA/CAEHHA Task Force
	Environmental Justice Coalition for Water
	Heal the Bay
	Heal the Ocean
	Nevada County Board of Realtors
	North Bay Association of Realtors
	Occidental Arts and Ecology Center
	Paradise Ridge Chamber of Commerce
	Pasadena Foothills Association of Realtors
	Placer County Association of Realtors
	Riverside County United Communities
	Regional Council of Rural Counties
	Sacramento Association of Realtors
	Self-Help Enterprises
	Shasta/Humboldt Association of Realtors
	Topanga Association for a Scenic Community
	United Winegrowers for Sonoma County
	West County Realty
Businesses	88 Realty
	Advanced Onsite Systems
	Advantage
	Bio Solutions, Inc.
	Brown and Caldwell
	Brown & Carlton
	Century 21 Alliance
	Dottie Ray Realty
	Envirocycle Advanced Wastewater Treatment
	FSBO Real Estate
	Hydro Nova
	Infiltrator Systems, Inc.
	International Wastewater Solutions Corporation
	J Hill Consulting
	Jan Bates Realty
	KBI
	Law Offices of John James Doyle
	Lehmann & Associates
	Meadowbrook
	NaturClean

Table 1 (continued)
OWTS IS/NOP Commenters (Written and Oral)

Category	Commenter	
	Prudential	
	PWA	
	S. Groner Associates, Inc.	
	Sun Frost	
	Western Manufactured Housing Communities Association	
	Westmark Enterprises	
	Winzler & Kelly Consulting Engineers	
Individuals	Barnee Alexander, Santa Rosa	Jim Irving, Paso Robles
	Cameron Applegate, Villa Grande	Edward Kehoe, Occidental
	Judy Arenas, Butte County	Douglas Kerr, Healdsburg
	Diane Banner	Gene Koch, Occidental
	Pat Bocca, Sebastopol	Kathleen McGowan
	Wilbert Brown, Occidental	Marc Miller, Menifee Valley
	Shirley Byrd-Solem, Santa Rosa	Richard Miller
	Margaret Chung, San Francisco	Ben Picker, Red Bluff
	John Chyle, Jenner	Trudy Olesiuk, Soulsbyville
	Brian Connolly, Santa Rosa	Lee Rennacker, Oakview
	Jeanette Dillman, Guerneville	John Rosenblum
	Brock Dolman, Occidental	Bob Russell, Santa Rosa
	Larry Elkins, Iso	Joseph Soulia, Sutherlin, OR
	Lee Enemark, Ukiah	Bob Stark, Salmon Creek
	Clayton Engstrom, Petaluma	Mark Stevens, Sebastopol
	Lou Ensley, Forestville	Ken Stuart
	Diane Healy, Forestville	Andrew Syversen
	Chris Johnson, Santa Rosa	Mark Tevjesen, Camp Meeker
	Mike Fagan, San Diego	William Theyskens, Prunedale
	John Farley, Guerneville	Sue Thollaug, Guerneville
	Bob Feinbaum, Salmon Creek	Dorothy Varellas, Sonora
	Jack Hadley, Santa Rosa	B.D. Wilson, Camp Meeker
	Patrick Hanley, Sebastopol	Pat Wiggins, Santa Rosa
	Kathy Hayes, Santa Rosa	Alene Yusov
	Rebecca Hermosillo, Sonoma	
Publications	*Chico Enterprise-Record*	
	(Downieville) *Mountain Messenger*	
	(El Dorado) *Mountain Democrat*	
	Grass Valley Union	
	Point Reyes Light	
	Red Bluff Daily News	
	Redding Record-Searchlight	

Table 1 (continued) OWTS IS/NOP Commenters (Written and Oral)	
Category	**Commenter**
	(Riverside) *Press-Enterprise* (PE.com)
	(Santa Rosa) *Press Democrat*
	Sonoma West Times & News
	Ventura County Star

IV. SUMMARY OF PUBLIC COMMENTS

More than 300 letters were received, and more than 80 people's concerns were heard, during the public comment period on the IS/NOP. The commenters ranged from representatives of public agencies and organizations to business owners and private individuals. Even with the broad range of commenters, a few common themes could be identified among the comments received. The following points summarize the most commonly heard concerns, without attempting to qualify, explain, or respond to them. A more detailed list of comments is provided at the end of this report.

GENERAL SUPPORT FOR THE PROJECT

Some stakeholders have expressed general support for the proposed project and AB 885, feel OWTS-related water quality issues need to be resolved, are glad to see the State is doing something to help resolve these issues, and feel more comprehensive and coordinated regulation of OWTS is long overdue. Many supporters of the proposed project in general also offered specific comments involving proposed modifications to the draft regulations with the intention of improving the proposed regulations – these comments are summarized in the "Approach to the Regulations" and "Alternatives" sections below.

GENERAL SUPPORT FOR THE NO PROJECT ALTERNATIVE

Other stakeholders feel the current OWTS regulatory environment works fine, the state's soil and hydrogeologic conditions already do a good job of treating OWTS effluent, more government regulations and associated costs for homeowners and business owners are not warranted, and "if it ain't broke, don't fix it."

APPROACH TO THE REGULATIONS

1. This action will cause a public health risk. Standardized criteria are needed for siting OWTS. The site evaluation requirements should be more stringent and include a number of specified parameters.

2. The State Water Board should consider a less prescriptive and/or burdensome approach. The prescribed dispersal system application rates and separation to groundwater requirements are too restrictive. "One size fits all" won't work in California; the regulations need to be more flexible.

3. The regulations and EIR need to recognize that AB 885 calls for minimum requirements, not uniform requirements.

4. A more balanced presentation of situations where properly sited and maintained systems do not contaminate groundwater is needed; too much emphasis was placed on contaminant plumes and it was assumed that systems routinely contaminate groundwater. The regulation of OWTS should be an application of risk management and not the elimination of all risk.

5. Compliance costs versus the environmental benefit should be evaluated. The regulations should include cost limits and a more reasonable timeline for improvements.

MONITORING

6. Monitoring domestic wells does not make sense:

   - The monitoring cannot be tied to a septic system.
   - The data collected in El Dorado, Yuba, and Tehama Counties cannot be tied to septic systems.
   - Mandated monitoring is too expensive for state and local agencies.

7. Suggested changes to monitoring program:

   - The State Water Board should do as DHS does and only require the testing of private wells that serve five or more homes.
   - Consider telemetry for monitoring systems in lieu of sampling quarterly.
   - The DEIR must note that the monitoring requirements of Section 13269 may be waived by the regional or state boards.

8. Water well testing requirements need to be clarified and related issues addressed.

9. Drop the point-of-sale inspection requirement:

   - If resources won't be provided to compensate the local governments, it won't work.
   - It is already taking place in some areas of the state.
   - It's not scientific; monitor at the time of system upgrade or new construction or just prescribe monitoring at regular intervals (maybe every 3–5 years).
   - It's too burdensome and will cause delays in real estate transactions and increased closing costs, especially in remote areas.
   - By collecting data at point of sale, there is no scientific basis from which to evaluate trends in water quality.

COSTS

10. Compliance costs versus the environmental benefit should be evaluated; a cost/benefit analysis is needed on a regional basis, not just from a statewide perspective.

11. The regulations do not address the legislative intent of AB 885 with respect to assisting private property owners with funding assistance.

12. Increased costs for homeowners

13. Increased costs for agencies

SECTION 303(D)-LISTED IMPAIRED WATERS

14. The 303(d) provisions will force people with existing systems from their homes. In many cases there is no suitable area to install systems that meet the dispersal system area requirements, even with supplemental treatment (e.g., Malibu, Russian River).

15. Greater recognition of regionally unique hydrology and geology should be considered in the watersheds of impaired water bodies, which may require regulation of OWTS beyond 600 feet.

REGULATORY EFFECTS

16. The regulations may change Regional Water Board v. local agency responsibilities:

    - Regional Water Board responsibilities for WDR oversight may require them to be more involved in site evaluation and construction plan review to ensure the new regulations are complied with, thus increasing their workloads and delaying the county building permit process, which would continue to focus on non-OWTS issues.

    - Regional Water Board workloads will increase because local agencies will not want to enforce the new regulations – identify/better define their oversight authority.

    - Local agency enforcement costs will rise since illegal repairs and failures will increase as property owners try to avoid high compliance costs.

    - The regulations will affect government services by placing an increased workload on local agencies because of pressure for them to change existing local regulations.

17. Address the impacts associated with the likely scenario of some local agencies (especially rural ones) not implementing the new regulations:

    - The State or Regional Water Boards implementing them instead or
    - Local agencies suspending building permits instead.

18. The discussion in the IS re: how the proposed project could result in significant water quality impacts fails to recognize that local agencies are free to take actions to further protect water quality.

EQUIPMENT

19. More reliance on unproven treatment technologies could actually cause adverse water quality impacts if they are not properly installed or maintained, or if such systems fail.

20. The EIR analysis needs to recognize that many homeowners will avoid routine repairs to avoid the new statewide requirements, thus decreasing system performance. The prohibitive costs to homeowners may lead to illegal repairs or homeowners skipping repairs.

SCIENCE/DATA

21. The State should evaluate all available health data in the EIR to see if there is an existing problem.

22. The EIR needs to provide the scientific basis for why the proposed water quality effluent levels are proposed.

V. ADDITIONAL SOURCES OF INFORMATION

Some commenters submitted or identified additional sources of information along with their comments. These materials are being reviewed by the State Water Board and EDAW. Table 2 lists the additional sources of information provided or identified by commenters.

Table 2
Additional Sources of Information from Commenters

Resource	Provider	Obtained?
The Status and Future of Decentralized and Onsite Wastewater Treatment Technologies in Florida (Small Flows Quarterly, Winter 2005, Vol. 6, No. 1)	Brock Dolman, Water Institute Director, Occidental Arts and Ecology Center (also Gene Koch, Occidental)	Yes
CCDEH Baseline Draft (v. 8.3.05)	Robert L. Kennedy, CCDEH	Yes
Lower Rincon Creek Watershed Study (County of Santa Barbara)	Hillary Hauser, Heal the Bay	Yes
Memorandum from Jeremy Koonce, Santa Barbara County Water Agency (selected pages)	Hillary Hauser, Heal the Bay	Yes
Septic System Sanitary Survey for Santa Barbara County (Questa Engineering, June 2003)	Hillary Hauser, Heal the Bay	Yes
Ramlit report on Cumulative Impacts, Region #1	Ted Walker, California Environmental Health Professionals	No
California County and U.S. Gravelless Chamber Sizing Summary (list)	Infiltrator Systems, Inc.	Yes
Review of Chamber Systems and Their Sizing for Wastewater Treatment Systems (Douglas Joy, PhD, Ontario Rural Wastewater Centre, November 2001)	Infiltrator Systems, Inc.	Yes
A Review of Literature and Computations for Chamber-Style Onsite Wastewater Distribution Systems (Timothy N. Burcham, Innovative Biosystems Engineering, June 2001)	Infiltrator Systems, Inc.	Yes
Surface Failure Rates of Chamber and Traditional Aggregate-Laden Trenches in Oregon (Small Flow Quarterly, Fall 2002, Vol. 3, No. 4)	Infiltrator Systems, Inc.	Yes
The Next Generation in Onsite Chambers: Quick 4 Standard Chamber (Infiltrator Systems product brochure)	Infiltrator Systems, Inc.	Yes
Wastewater Infiltration into Soil and the Effects of Infiltrative Surface Architecture (Small Flow Quarterly, Winter 2004, Vol. 5, No. 1)	Infiltrator Systems, Inc.	Yes
Final Report—Infiltrator Florida Side-by-Side Test Site, Killarney Elementary School, Winter Park, Florida (Nodarse & Associates, November 1997)	Infiltrator Systems, Inc.	Yes
Corporate information on White Knight Aerobic Microbial Inoculator, Pirana, Knight Nutrient Reduction Device	International Wastewater Solutions Corp.	Yes
Wastewater Subsurface Drip Distribution: Peer Reviewed Guidelines for Design, Operation, and Maintenance (EPRI and Tennessee Valley Authority, 2004)	Robert Beggs, Brown and Caldwell	No
U.S. Census Bureau Statistics on Septic Tanks, 1995 [illegible]	Larry Schussler, Sun Frost	[Yes]

Table 2 (continued) Additional Sources of Information from Commenters		
Resource	**Resource**	**Resource**
"Proposed Tomales Bay cleanup is based on outdated science" (Pt Reyes Light, April 21, 2005, by Corey S. Goodman, PhD)	Gene Koch, Occidental	Yes
Stressor Identification Guidance Document (USEPA	Gene Koch, Occidental	Yes (downloaded)
A 25-Year History of the Onsite Industry (Kreissl and Suhrer, Small Flows Quarterly, Winter 2005, Vol. 6, No. 1)	Gene Koch, Occidental	Yes (downloaded)
Wastewater Treatment: Overview and Background (Copeland, 1999)	Gene Koch, Occidental	Yes (downloaded)
Preliminary Report: An Evaluation of Wastewater Disposal and Water Quality in the San Lorenzo River Watershed (Santa Cruz County, 1989)	John Ricker, Santa Cruz County Water Resources Program Coordinator	Yes (downloaded)
San Lorenzo Nitrate Management Plan: 1995 (Santa Cruz County, 1995) http://sccounty01.co.santa-cruz.ca.us/eh/environmental_water_quality/pdfs/sl_nitrate_management_plan_1995.pdf	John Ricker, Santa Cruz County Water Resources Program Coordinator	No (file problem at site)

VI. DETAILED LIST OF COMMENTS

The following is a detailed list of comments received during the public scoping period. Although it does not contain every individual comment, it reflects the general substance of the issues raised by commenters and represents the broad range of views and opinions presented. No attempt is made to qualify, explain, or respond to the comments and concerns. Numbering is for reference only and does not reflect any attempt at weighting the applicability of the comments.

APPROACH TO THE REGULATIONS

1. This action will cause a public health risk. Standardized criteria are needed for siting OWTS. The site evaluation requirements should be more stringent and include a number of specified parameters.

   - Unless more guidance is provided on what types of systems are appropriate under specific soil and geologic conditions, premature failure of mound and at-grade systems could occur, causing soil erosion and public health hazards.

   - Identify "trigger points" for when to use alternative systems.

2. The State Water Board should consider a less prescriptive and/or burdensome approach. The prescribed dispersal system application rates and separation to groundwater requirements are too restrictive. "One size fits all" won't work in California; the regulations need to be more flexible.

   - The EIR needs to explain why inconsistent regulation of OWTS throughout the state is not desirable and why a consistent regulatory approach is desirable when conditions vary so much around the state.

   - Make sure treatment requirements are attainable and take local geology into consideration.

- The regulatory approach needed for fractured rock and Malibu/coastal areas should not be applied to the rest of the state.

- Severely limiting the use of seepage pits is not justified under certain situations where adequate pit depths, soil characteristics, separation from groundwater and well siting conditions apply.

3. The regulations and EIR need to recognize that AB 885 calls for minimum requirements, not uniform requirements.

4. A more balanced presentation of situations where properly sited and maintained systems do not contaminate groundwater is needed; too much emphasis was placed on contaminant plumes and it was assumed that systems routinely contaminate groundwater. The regulation of OWTS should be an application of risk management and not the elimination of all risk.

   - The regulations should be less "overprotective"; the threat of pollution from OWTS is overestimated.

   - Section 22910(b) of the regulations should be edited so it is not interpreted to require complete removal of the specified pollutants.

   - Given the state's limited resources, the regulations should put more focus on the systems or areas of greatest concern or risk.

   - Need to make sure there is a problem first before monitoring, sampling, or supplemental systems are required.

   - The regulations need to recognize the extent of in-ground treatment, dilution, and attenuation of nitrogen compounds and other contaminants. Allow for the accounting of nitrogen reduction in the soils via plant uptake.

5. Compliance costs versus the environmental benefit should be evaluated. The regulations should include cost limits and a more reasonable timeline for improvements.

6. There are now testing methods to determine sources of fecal coliform; these should be used before action is taken to make sure OWTS is the major source. The proposed rule needs to draw a distinction between bacterial and nitrate pollution caused by animal waste vs. human waste.

7. The setback requirements (related to distances from streams, springs, culverts, and homes) should be put back into the regulations.

   - The project needs further definition for the setback from a 303(d)-listed water body.

   - Section 22940 should be edited so its requirements apply to all OWTS contributing to an impairment, not just those within 600 feet of an impaired water body.

   - The Regional Water Boards should be allowed to establish distances greater than 600 feet as zones of protection for 303(d)-listed waters.

8. The regulations should follow EPA guidance that says "the use of biological assessments and biocriteria in state and tribal water quality standards programs is a top priority of the EPA." Consider including the EPA management guidelines.

9. The State Water Board should use programs and policies similar to those developed by Santa Cruz County and the Central Coast Regional Water Quality Control Board.

10. Since certifications of septic systems and private wells are already commonplace before the close of sale of private properties, greater cooperation between the mortgage industry and State and Regional Water Boards could allow the related portions of the regulations to be eliminated.

11. Education

    - Unless the new requirements are incorporated into the plumbing code, additional education and training will be needed.

    - More education of property owners is needed and would be a more efficient use of state money.

12. The State Water Board needs to be consistent with the pending changeover in pathogen indicator criteria (from fecal coliform to enterococci or *E. coli*).

13. There should be more emphasis on water conservation and reducing the amount of water that enters the treatment system.

14. To comply with Cal EPA's Environmental Justice Strategy, the State Water Board needs to conduct more public outreach, especially in rural and low-income areas.

15. Clarifications: Change the definition of "major repair" to be less inclusive. "Major repair" needs to be defined better. Need more definition of "pump failure." Operating permit renewal conditions should be added to the regulations. Language clarifying the scope of the regulations with respect to seepage pits would clear up confusion surrounding a number of related sections in the draft rule.

MONITORING

16. Monitoring domestic wells does not make sense:

    - The monitoring cannot be tied to a septic system.
    - The data collected in El Dorado, Yuba, and Tehama Counties cannot be tied to septic systems.
    - Mandated monitoring is too expensive for state and local agencies.

17. Suggested changes to monitoring program:

    - The State Water Board should do as DHS does and only require the testing of private wells that serve five or more homes.

    - Consider telemetry for monitoring systems in lieu of sampling quarterly.

    - The DEIR must note that the monitoring requirements of Section 13269 may be waived by the regional or state boards.

18. Water well testing requirements need to be clarified and related issues addressed:

    - standardization, sampling and evaluation protocol for point-of-sale inspections to ensure data viability

    - timing

    - criteria for interpretation

    - reporting requirements

- how to link to neighboring septic systems
- take wet year v. dry year and seasonal differences into account – e.g., in some wet years conditions will never be suitable for testing.

19. Drop the point-of-sale inspection requirement:
    - If resources won't be provided to compensate the local governments, it won't work.
    - It is already taking place in some areas of the state.
    - It's not scientific; monitor at the time of system upgrade or new construction or just prescribe monitoring at regular intervals (maybe every 3–5 years).
    - It's too burdensome and will cause delays in real estate transactions and increased closing costs, especially in remote areas.
    - By collecting data at point of sale, there is no scientific basis from which to evaluate trends in water quality.
20. Suggested changes to the point-of-sale inspection requirement:
    - Enforcement capabilities should be accounted for.
    - The State should look at including the NAWT [National Association of Wastewater Transporters] process for point-of-sale inspections of septic tanks.
    - The State should use the Massachusetts approach of setting aside funds in escrow and then allowing 6 months to make any necessary improvements.
    - Septic tank inspections and water quality testing are already occurring during real estate transactions in many places throughout the state; the key difference with the proposed regulations is that the results of these tests and inspections will be publicly disclosed.

Costs

21. Compliance costs versus the environmental benefit should be evaluated; a cost/benefit analysis is needed on a regional basis, not just from a statewide perspective.
22. The regulations do not address the legislative intent of AB 885 with respect to assisting private property owners with funding assistance.
23. Increased costs for homeowners:
    - OWTS-related design and installation costs will increase and people will be forced to use expensive supplemental treatment systems instead of conventional systems.
    - The regulations will make the cost of developing lots too expensive.
    - The prohibitive costs to homeowners may lead to illegal repairs or homeowners skipping repairs.
    - The regulations could increase the cost of liability insurance for contractors, which is already too expensive.

24. Increased costs for agencies:

    - Local agency enforcement costs will rise since illegal repairs and failures will increase as property owners try to avoid high compliance costs.

    - Costs to local agencies will make them inclined not to implement the regulations, especially because the regulations will require the hiring of many new staff to be implemented.

25. Funding sources:

    - The State Water Board needs to find a way to combine the funding of the stormwater monitoring, OWTS, groundwater monitoring, and underground tank programs.

    - The State Water Board should consider faster funding (from the State Revolving Fund and/or grants) for sewers and funding for non-sewered communities.

SECTION 303(D)-LISTED IMPAIRED WATERS

26. The 303(d) provisions will force people with existing systems from their homes. In many cases there is no suitable area to install systems that meet the dispersal system area requirements, even with supplemental treatment (e.g., Malibu, Russian River).

27. The project needs further definition for the setback from a 303(d)-listed water body.

28. Greater recognition of regionally unique hydrology and geology should be considered in the watersheds of impaired water bodies, which may require regulation of OWTS beyond 600 feet:

    - The Regional Water Boards should be allowed to establish distances greater than 600 feet as zones of protection for 303(d)-listed waters.

    - The requirements that apply to OWTS within 600 feet of an impaired water body need to also include OWTS adjacent to those waters tributary to and upstream of impaired waters.

29. The State Water Board should include microbial source tracking as an alternative to evaluate 303(d)-listed waters.

REGULATORY EFFECTS

30. The regulations may change Regional Water Board v. local agency responsibilities:

    - Regional Water Board responsibilities for WDR oversight may require them to be more involved in site evaluation and construction plan review to ensure the new regulations are complied with, thus increasing their workloads and delaying the county building permit process, which would continue to focus on non-OWTS issues.

    - Regional Water Board approval of local agency soil and groundwater evaluation techniques, including soil mottling, should only need to occur once when the authorization process takes place.

    - Regional Water Board workloads will increase because local agencies will not want to enforce the new regulations – identify/better define their oversight authority.

- Local agency enforcement costs will rise since illegal repairs and failures will increase as property owners try to avoid high compliance costs.

- By their very nature, supplemental or alternative treatment systems require intensive oversight and management relative to conventional systems, thus greatly increasing the workload of local agencies.

- The regulations will affect government services by placing an increased workload on local agencies because of pressure for them to change existing local regulations.

31. Address the impacts associated with the likely scenario of some local agencies (especially rural ones) not implementing the new regulations:

    - The State or Regional Water Boards implementing them instead or
    - Local agencies suspending building permits instead.

32. The State should better define Responsible Management Entities (HOAs, etc.).

33. The discussion in the IS re: how the proposed project could result in significant water quality impacts fails to recognize that local agencies are free to take actions to further protect water quality:

    - Local agencies need to have more flexibility to grant variances (including flexibility to decide when inspections/site investigations are necessary) and the EIR alternatives should include local variances.

    - Need to define parameters/conditions by which variances will be allowed.

    - Variances for dispersal fields of supplemental treatment system should not be allowed unless a state-certified professional or equivalent has verified the viability of the replacement dispersal field.

    - Need to analyze what exemptions will likely be approved.

34. Differences between the California Plumbing Code and the proposed regulations need to be clear; otherwise, there will be lots of room for interpretation by permittees and agencies.

35. Allowing the local permitting authority the right to enter onto property for monitoring purposes is burdening the property with an easement and is therefore a taking.

EQUIPMENT

36. More reliance on unproven treatment technologies could actually cause adverse water quality impacts if they are not properly installed or maintained, or if such systems fail.

37. The EIR analysis needs to recognize that many homeowners will avoid routine repairs to avoid the new statewide requirements, thus decreasing system performance. The prohibitive costs to homeowners may lead to illegal repairs or homeowners skipping repairs.

38. To avoid environmental and cost impacts where properties do not have phone lines, alternatives to the requirement of having remote dial-out features should be considered.

39. "Gravelless" chamber systems will not be as competitive with conventional systems if such systems are not given credit for lower application area requirements.

40. Supplemental treatment systems should be required when there are percolation rates of less than five minutes per inch *or* (not *and*) there is less than 5 feet separation to groundwater. This would be compatible with the conditions under which supplemental treatment is required in many counties.

41. Variances for dispersal fields of supplemental treatment system should not be allowed unless a state-certified professional or equivalent has verified the viability of the replacement dispersal field.

42. The regulations should be modified to allow certain types of dispersal systems when soils have low hydraulic conductivity.

43. The EIR needs to investigate alternatives to disinfection given related adverse impacts to the environment.

44. List the cost, effectiveness, and knowledge level required for operation of each type of proposed OWTS system. The EIR will need to summarize available technologies and describe how effective they are in meeting the proposed requirements, how knowledgeable a property owner must be to operate and maintain them properly, and their relative costs.

45. Specific equipment issues:

    - A definition of "relief-line systems" is needed and related alternatives should be offered.
    - Effluent filters should be required for all systems, not just new systems and those undergoing major repair.
    - The use of composting toilets should be encouraged because this will help address nitrate problems.
    - Include gray water systems as an alternative.
    - For grease traps, the State should evaluate the changes that IAPMO is considering right now.

SCIENCE/DATA

46. The State should evaluate all available health data in the EIR to see if there is an existing problem:

    - The prescriptive standards should not be applied until site-specific data show there is a problem.
    - Conclusions in the EIR need to be substantiated with evidence, especially in areas that do not have 303(d)-listed water bodies. If such substantiation cannot be made, the EIR analysis should focus on 303(d) watersheds.
    - A statewide clearinghouse needs to be established as an information source on supplemental treatment system performance, cost, etc.
    - The DEIR should identify what major factors have led to failure of OWTS for each major region or county of the state. More specific data on failures and OWTS plumes need to be presented.

47. Can't prove higher standards for OWTS are needed to preserve quality of drinking water:

    - Water contamination is coming from treatment facilities, agricultural runoff, livestock, wildlife – all much larger sources of contamination than septic systems.
    - There are now testing methods to determine source of fecal coliform; these should be used.

- The use of well data to monitor OWTS performance is not a valid approach since water quality in wells is not necessarily indicative of OWTS performance.

48. The EIR needs to provide the scientific basis for why the proposed water quality effluent levels are proposed.

    - This is particularly true in consideration of the assimilative capacity of groundwater and particularly in areas where densities are small and the cumulative impact is low.

    - The IS statement that the best soils only reduce nitrogen by 10 to 20 percent is incorrect, as documented by other studies.

    - The regulations need to recognize the extent of in-ground treatment, dilution, and attenuation of nitrogen compounds and other contaminants.

49. The 10 mg/liter discharge standard for total nitrogen is an average standard; therefore, much higher levels can be expected in some areas.

QUALIFIED PROFESSIONALS

50. Already, some areas do not have enough qualified personnel to perform the septic tank inspections. The point-of-sale requirement will add to the deficiency:

    - A shortage of qualified professionals could delay repairs that are immediate public health hazards.

    - There will be adverse economic impacts resulting from unscrupulous qualified professionals and unscrupulous qualified service providers.

    - The numbers of qualified service providers (while currently deficient) can be addressed by industry.

    - The traditional use of "paraprofessionals" should be allowed to continue to address the expected shortage of qualified professionals.

    - A certification program and coordinated training center are needed for qualified professionals.

EIR ASSUMPTIONS AND CONTENT

51. Revisit the IS/NOP's impact assessment assumptions after the EIR analysis is complete; the EIR needs to substantiate that these assumptions are correct. Conclusions in the EIR need to be substantiated with evidence, especially in areas that do not have 303(d)-listed water bodies. If such substantiation cannot be made, the EIR analysis should focus on 303(d) watersheds.

52. Adjust for bias in Initial Study – too focused on urban environments, need to focus more on rural areas. This will affect small, rural counties in a disproportionate and negative manner. The analysis needs to distinguish between urban v. rural impacts.

53. The EIR analysis needs to recognize that many homeowners will avoid routine repairs to avoid the new statewide requirements, thus decreasing system performance.

    - "No impact" conclusions in the IS/NOP ignore impacts to existing systems.

    - The regulations will reduce the number of OWTS installed over time because of higher installation costs, performance requirements that can't be met in some situations, etc.

54. In the EIR, the State Water Board needs to respond to the issues and concerns of stakeholders. The EIR needs to describe the stakeholder process and the issues discussed – need to summarize how we got to where we are now.

55. The EIR should summarize relevant portions of the regional Water Quality Control Plans, including pertinent water quality objectives.

    - Additional information is needed on how the proposed regulations compare to, and differ from, related requirements of regional Water Quality Control Plans.

    - The planned comparison of the proposed regulations to representative regulations at the local and regional levels is critical to the EIR analysis.

    - This analysis should also address how successful local and regional regulations have been from the standpoint of protecting water quality.

56. The State should do 9 different EIRs based on the Regional Water Boards and/or on a local government basis as opposed to a Program EIR for the entire state.

57. The DEIR should identify what major factors have led to failure of OWTS for each major region or county of the state. More specific data on failures and OWTS plumes need to be presented.

LAND USE, PLANNING, POPULATION, AND GROWTH-RELATED IMPACTS

58. The regulations will alter growth patterns.

    - The regulations will make the cost of developing lots too expensive; the new application rates will lead to larger and more expensive lots.

    - The regulations will force local planning agencies to increase minimum lot sizes.

    - The regulations will force OWTS onto Class 1 agricultural lands (including riparian areas) as opposed to areas with poor soils, such as hillsides and other areas where much development is now occurring or is planned.

    - Because of the increase in OWTS-related costs caused by the regulations and/or other aspects of the regulations, more farmland will be converted to non-farming uses since fewer farmers will be able to reside on farmland as part of an economic unit.

    - The regulations will increase the minimum soil depth needed to construct OWTS, thereby placing more development pressure on farmland that has higher quality and deeper soils.

    - There will be a shift away from OWTS and toward more community sewer systems, thereby leading to an increase in lot densities in rural areas.

59. The regulations will restrict growth and decrease the population of the State:

    - The proposed regulations will render existing lots throughout the state unbuildable or prevent people from building in areas already designated for development.

    - The EIR should evaluate the economic costs of the regulations shutting down all development in some areas.

- The regulations will, in effect, lead to the prohibition of the fair and free use of property and therefore is a taking of property.

60. The regulations will induce growth and increase the population of the State:

    - The regulations will make many lots that were previously unbuildable buildable; this proposal will open up land to development that cannot currently be developed.

    - The regulations will induce growth in areas where local regulations are currently more protective (since there will be pressure to weaken local regulations over time to match the statewide regulations) and in areas that currently do not allow supplemental treatment.

    - In some cases, the project will simply make a public sewer or community collection system the only option; expansions of sewer systems are growth inducing.

61. The 303(d) provisions will force people with existing systems from their homes. In many cases there is no suitable area to install systems that meet the dispersal system area requirements, even with supplemental treatment (e.g., Malibu, Russian River).

62. Can't condemn homes on properties too small to upgrade to new standards; if homes are condemned, what happens to folks and environment re: construction of replacement housing? Condemnation could cause blight in urban areas.

OTHER ENVIRONMENTAL IMPACTS

Public Utilities (including Biosolids)

63. In some cases, the project will simply make a public sewer or community collection system the only option; there will be a shift away from OWTS and toward more community sewer systems:

    - As more centralized treatment systems are used, what will happen to groundwater?

    - Since the failure of centralized treatment plants is often catastrophic, greater reliance on such plants relative to OWTS and associated safety and health hazards should be addressed in the EIR.

    - Considering the frequency of accidental releases from wastewater treatment plants, the EIR needs to evaluate the adverse impacts of increasing such releases as the reliance on such plants increases over time relative to more dispersed effluent from OWTS.

64. Biosolids:

    - Need to address the fact that in many watersheds biosolids/sludge being applied on farmland are a major source of fecal matter in streams (as opposed to OWTS being a major source).

    - Odor impacts should be addressed in the EIR, including odor of the additional biosolids that will be generated.

65. The EIR needs to assess the impacts of the illegal dumping that will likely occur (because many disposal facilities are at or near capacity) and related biohazards. Some wastewater treatment plants will not be able to handle the sudden influx of additional septage that will be pumped from OWTS.

Water Quality

66. The EIR does not need to address water quality because the proposed project will not lead to impacts on water quality – the Initial Study is overly cautious.

    - The discussion in the IS re: how the proposed project could result in significant water quality impacts fails to recognize that local agencies are free to take action to further protect water quality.

67. The water quality and public health analyses need to address the consequences of an expected shift to more Regional Water Board oversight and permitting from local oversight and permitting (there may be a staffing shortage and a lack of local expertise, and therefore more adverse impacts to the environment).

68. In many watersheds, biosolids/sludge being applied on farmland are a major source of fecal matter in streams (as opposed to OWTS being a major source). The EIR needs to define the relative nitrate contributions of each major source and recognize that the degree of impact from each source varies widely under a wide range of factors.

69. The chemical "shocking" of wells may be more commonplace if fecal coliform shows up in test results; assess how such chemicals will affect water quality and public health.

70. As more centralized treatment systems are used, what will happen to groundwater?

Public Health

71. The chemical "shocking" of wells may be more commonplace if fecal coliform shows up in test results; assess how such chemicals will affect water quality and public health.

72. The water quality and public health analyses need to address the consequences of an expected shift to more Regional Water Board oversight and permitting from local oversight and permitting (there may be a staffing shortage and a lack of local expertise, and therefore more adverse impacts to the environment).

Hazards and Hazardous Materials

73. The EIR needs to address the release of hazardous materials, including chlorine and other chemicals associated with more use of disinfection units and products.

74. Recreational vehicle parks would be adversely affected if the regulations prevent toxic deodorizing chemical wastes from being discharged to their septic systems.

75. The use, storage, and handling of disinfectants and other chemicals used at wastewater treatment plants will increase.

76. Since the failure of centralized treatment plants is often catastrophic, greater reliance on such plants relative to OWTS and associated safety and health hazards should be addressed in the EIR.

Geology/Soils

77. The DEIR needs to include a thorough discussion of the state's diverse geologic, climatic, soil, groundwater regimes, and topographical differences.

78. The EIR needs to address potential impacts on soil stability (downslope damage to property cited from an upslope "repair" of an OWTS).

79. The proposed regulations change the soil classification system most commonly used in the state. What will be the impact of this change?

80. The regulations will change industry standards for sand depths. What will be the related environmental impact?

81. Encouraging the use of supplemental systems will increase soil erosion and sedimentation of water bodies where unstable soil and geologic conditions exist (by allowing new development to occur where it would not otherwise exist or during conversions from conventional to supplemental systems).

82. Many of the conclusions re: well susceptibility to OWTS effluent are based on fractured rock environments. What areas of the state have such an environment and under what circumstances are OWTS allowed in these environments?

Air Quality

83. Odor impacts should be addressed in the EIR, including odor of the additional biosolids that will be generated.

84. The EIR needs to include an air quality impact assessment of increased vehicle and equipment emissions:

- emissions associated with more frequent inspection, pumping, and repair for 1.2 million systems
- emissions from additional RWQCB and local agency staff trips
- emissions from vehicle trips to areas that are now undeveloped

85. Since energy use will increase with the greater use of supplemental treatment, the EIR needs to address adverse air quality impacts associated with power generation.

Biological Resources

86. The dispersal area requirements will make leaching areas bigger and force the removal of trees.

87. Constructed wetlands may be used to help improve effluent treatment, therefore creating beneficial biological impacts.

88. Adverse biological effects of regulations:

- The likely extreme reduction in nitrate levels required by the regulations could actually cause adverse fishery impacts and other impacts related to ecosystem productivity in areas where nitrogen levels are not unduly high and are at naturally occurring low levels.

- In some streams, OWTS discharges help support summer baseflows; increasing the use of conventional sewer systems relative to OWTS may adversely affect special-status species that rely on such flows.

Noise

89. The noise impacts associated with audible alarms used on many supplemental systems need to be assessed.

Energy/Public Services

90. The project will lead to energy impacts.

91. Since energy use will increase with the greater use of supplemental treatment, the EIR needs to address adverse air quality impacts associated with power generation.

Environmental Justice

92. The EIR should evaluate environmental justice impacts of the proposed project and follow related requirements from Cal EPA.

Aesthetics

93. Greater reliance on mound systems and tree removal associated with larger dispersal fields will cause potentially significant aesthetic impacts.

Transportation/Traffic

94. Since the regulations will induce growth, the air quality impacts associated with more vehicle trips to areas that are now undeveloped need to be assessed.

95. Concentrating growth in areas served by centralized treatment systems will compound existing traffic problems.

Recreation

96. The EIR needs to assess the adverse recreation impacts that could occur if recreation facilities, especially in beach areas, cannot be expanded because they rely on conventional OWTS.

97. Recreational vehicle parks would be adversely affected if the regulations prevent toxic deodorizing chemical wastes from being discharged to their septic systems.

Economic Impacts

98. Compliance costs versus the environmental benefit should be evaluated.

99. A cost/benefit analysis is needed on a regional basis, not just from a statewide perspective.

Housing Affordability

100. The regulations will make houses and building much more expensive and exacerbate the existing housing affordability crisis in California:

- The EIR needs to assess the regulations' effects on housing prices.
- The new application rates will lead to larger and more expensive lots.
- Need to assess the potential for property devaluations.

101. Real estate transactions: The point-of-sale inspection requirements will delay real estate closings and increase closing costs, which will be passed on to homeowners. Delays may cause deals to exceed the time limits of the lenders, thereby subjecting homeowners to penalty costs.

102. The EIR should evaluate the economic costs of the regulations shutting down all development in some areas.

Cost of Systems

103. OWTS-related design and installation costs will increase and people will be forced to use expensive supplemental treatment systems instead of conventional systems.

104. People may not be able to build OWTS and may be forced to pay expensive sewer connection fees.

105. Homeowners may be forced to make expensive and time-consuming repairs or upgrades (e.g., upgrade to supplemental treatment in areas with less than 5 feet of separation to groundwater).

106. The EIR should assess the economic impact to the homeowner for all the regulatory costs and time associated with soil testing, percolation testing, and other requirements in the draft regulations (site evaluation reports, permitting, inspections, monitoring, operation and maintenance, the addition of septic tank filters, etc.)

107. Compliance costs of rebuilding after a fire/catastrophe should be evaluated.

Funding

108. As mitigation for adverse cost impacts, the State should have funding for upgrades and sewers.

109. Special funding should be made available to people with low incomes.

110. Costs are a significant Regional and State Water Board issue as there are no apparent practical funding mechanisms to support staff at any level.

Fiscal and Regulatory/Public Service Impacts

111. Local agency costs would increase:

- Local agency enforcement costs will rise since illegal repairs and failures will increase as property owners try to avoid high compliance costs.
- By their very nature, supplemental or alternative treatment systems require intensive oversight and management relative to conventional systems, thus greatly increasing the workload of local agencies.
- Costs to local agencies will make them inclined not to implement the regulations, especially because implementing the regulations will require the hiring of many new staff to be implemented.
- How will local agencies fund their new permitting and workload responsibilities?

112. Fiscal impacts should be a priority and not relegated to the appendix:

- The EIR should evaluate the fiscal impacts as a result of the point-of-sale monitoring.
- The regulations will make many lots that were previously unbuildable buildable; address the fiscal impacts of such development.

- Address the fiscal impacts of property devaluations caused by the regulations.
- The regulations will restrict growth or alter growth patterns; address the related fiscal impacts.

ALTERNATIVES

General Alternative Options

113. A performance standard alternative that is not restricted by prescriptive standards; include options that do not have mandatory siting, construction, and performance requirements.

114. An alternative that allows for performance standards that take into account the removal of pollutants as effluent moves through soil.

115. Look at what other states are doing as alternatives to the current approach.

116. An alternative that has point-of-sale requirements more like the State of Massachusetts program.

117. An alternative with more concise repair standards methodology in it, like Santa Cruz County.

118. An alternative that requires inspection and repair and/or retrofit of OWTS on resale or remodel, or on major remodel.

119. An alternative that provides more "teeth" for enforcement and oversight by Regional Water Boards, less discretion by local agencies.

120. An alternative that allows for waivers to the Water Code.

121. An alternative that doesn't require OWTS upgrades when sewers are going to be made available in 3 years.

122. Plumbing alternatives:
    - Work with the Universal Plumbing Code Commission to make one standard as an alternative to having this project and Appendix K in the UPC.
    - The State should not consider modifying the UPC as an alternative. This subject goes beyond plumbing.

123. An alternative that requires septic tank filters to be placed on all septic tanks.

124. Each previous draft of the regulations should be a separate alternative in the EIR. Negotiated elements in previous versions of the draft regulations should be included in an alternative.

125. Each type of independent element included in the proposed project needs to have its own alternatives analysis.

126. An alternative where ALAs and Regional Water Boards complete watershed-based evaluations and then develop ongoing monitoring programs based on the findings (the commenter also identified specific factors that should be considered during the evaluations).

127. Identify the environmentally superior alternative; such an alternative should eliminate impaired waters caused or partially caused by OWTS.

128. Heal the Bay has offered to define an "environmental community alternative."

129. An alternative that considers the tracking (certification?) of septage pumpers.

130. There should not be a "risk-based" alternative because history (Rincon Pt.) has shown risk already.

131. An alternative to the required operation permit called the "informed homeowner alternative" – one where the consumer understands issues and takes care of problems.

132. The range of alternatives presented does not meet CEQA requirements because project objective number 3 (implementation process) is not met. New alternatives that eliminate the higher cost items included in the proposed project and that better recognize regional and local differences throughout the state need to be added.

133. The alternatives need to include a "minimalist" and a "tiered" approach.

Comments on Proposed Alternatives

134. Support for anything but the no project alternative.

135. Some stakeholders support the CCDEH alternative:

- CCDEH submitted a new "baseline" document that is more up to date than the CCDEH alternative that was previously provided to state staff. They have requested this be the starting point of new collaborations among their members to produce a new alternative that can be used in the EIR. In the meantime, the new baseline document should replace the CCDEH alternative described in the IS/NOP. A key feature of their proposal is more analysis of water quality problem areas, data sharing, etc., that would lead to the designation of "Threatened and Impaired Areas." Improvements in OWTS management would then focus on these areas.

- The CCDEH alternative is not a consensus alternative; it is a work in progress. Therefore, remove "CCDEH" from its title.

- Is the CCDEH a true alternative from the standpoint of complying with what is required by AB 885 (especially from a water quality standpoint)?

136. The analysis of the No Project Alternative with Status Quo should include an analysis of the efficacy of current regulatory tools at the state and local levels:

- The No Project Alternative with Status Quo incorrectly assumes that requirements for OWTS adjacent to impaired water bodies would not be implemented under this alternative (Regional Water Boards already have such authority under the current TMDL development and implementation process).

- A number of existing regulatory environment features need to be described as part of the No Project Alternative with Status Quo definition.

137. The No Project Alternative with Statewide Requirements should be modified to include continuation of existing local ordinances as long as they comply with AB 885. Any changes to local ordinances would be mandated by the State or Regional Water Boards only to the extent that such changes are needed to comply with AB 885.

IMPLEMENTATION ISSUES

138. Local agencies need to have more flexibility to grant variances and the EIR alternatives should include local variances:

    - Need to define parameters/conditions under which variances will be allowed. Give Regional Water Boards and local agencies the flexibility to decide when inspections/site investigations are necessary.

    - Need longer window of compliance, low-cost loans, delay of upgrades until property is sold.

139. If the regulations require someone to upgrade their system, the property owner should be allowed to delay such an upgrade until they sell their property.

140. Differences between the California Plumbing Code and the proposed regulations need to be clear; otherwise, there will be lots of room for interpretation by permittees and agencies.

141. Appropriate education, outreach, and technical assistance programs should be available during implementation of the regulations.